

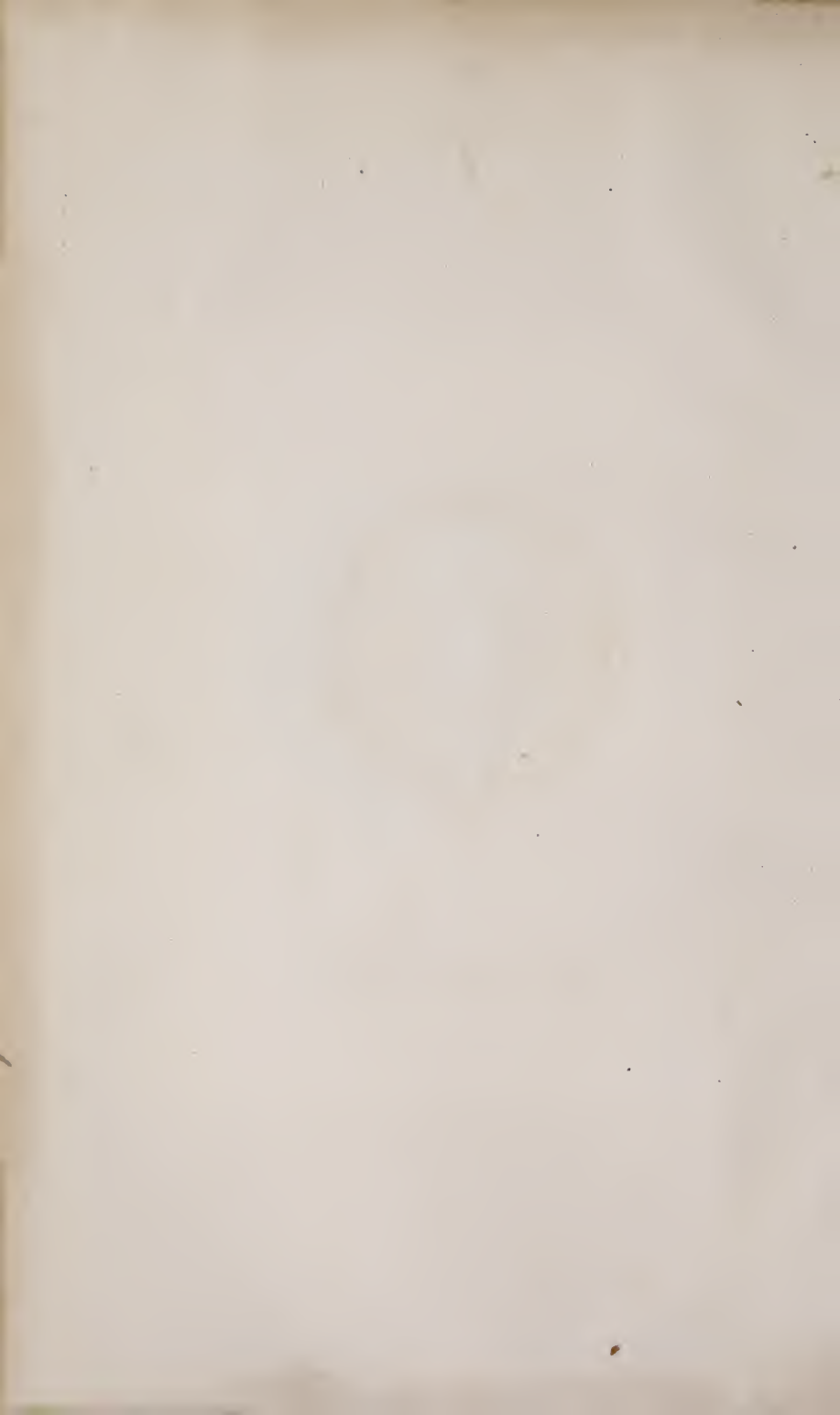
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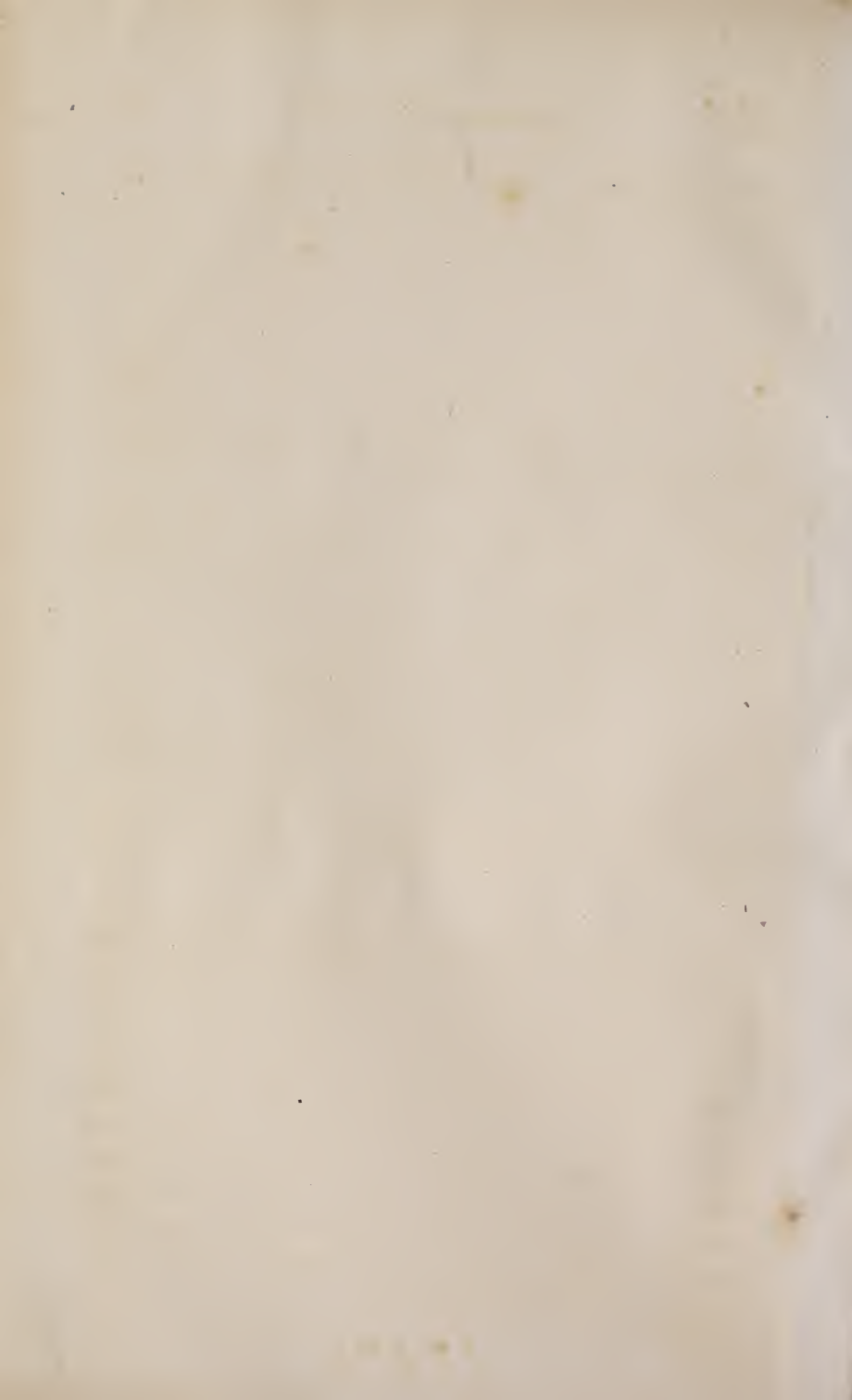


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PART FIRST.

ORIGINAL COMMUNICATIONS.

ART. I.—*Case of Extensive Osteo-Sarcoma.* Read before the Stark County Medical Society, by L. M. WHITING, M. D., of Canton, Ohio.

The following case is especially interesting by reason of the character and amount of morbid anatomy, presented on examination of the cadavre. But the train of distressing symptoms which attended the decline of the patient, and the mode adopted for the relief of some of the most pressing difficulties, it is thought may also be regarded as worthy of record. Its history, however, is necessarily meagre, for the reason, that like a thousand other individuals in trouble with obscure maladies, he "run the gauntlet" through files of doctors—some of whom may not inaptly be denominated savages, and his sufferings during this ordeal were not a whit behind those of the victims subjected to this aboriginal mode of torture amongst our North American Indians.

The first diseased manifestations were those common to malarious districts. The patient was a man 29 years of age, of nervous temperament, and by trade a Tailor. After being harrassed with intermittent fever, more or less, during a residence of some years on the Ohio canal, in the village of Fulton, in this county, he fell into a condition in which attacks of what are called by "the world's people" *bilious* trouble were frequent, and for the relief of which he took "Anti-bilious pills," and various nostrums—but finally resorted on these occasions to the use of Calomel; the effect of which was temporary freedom, and ability to continue his occupation. In the fall of 1851 he was engaged in an active political campaign, and being a candidate for office, rode much in the heat of the sun during some weeks, and of course was in an excited state most of the time. He now began to have frequent attacks of diarrhea, for the relief of which opiates and astringents were taken repeatedly. Being elected to the office of Clerk in the district court for this county, he removed to this town in February, 1852. He was now enfeebled and pale, and suffered with pain in the rectum, where he discovered some kind of obstruction. After some time spent in tampering with various forms of quackery, for "Piles," he visited Cleveland, and consulted Prof. Delamater, the elder; but (as he said) obtained no satisfactory information in regard to the character of his disease, or relief from his sufferings. Some further time was consumed in fruitless quacking; then he went to Wheeling, where he remained some weeks under the care of Dr. Hullihen, who adds to his brilliant reputation as a dental-surgeon fame in other departments of operative surgery. But he returned from his wandering still the prey of unmitigated disease. The autumn came, and with its falling leaves our poor invalid found himself steadily inclining earthward. His attempts at locomotion were attended with but indifferent success on account of a painful stiffness experienced in the left hip in the locality of which he noticed thickening of the soft-solids. A new prospect of entire relief now appeared in the shape of a burly "*Fellow*," who assured him that by a purely "*Botanic*" plan he would very soon be eased of all his troubles. A couple of months proved the pretender to be so near right that it was deemed unnecessary to retain his services longer in order to insure the fulfilment of his prediction.

On the 12th day of January, present year, I was requested to visit the sufferer. Found him barely able to traverse his room with the help of a cane, and complaining of very severe pain in the left leg—in the lower part of the back, and in the bowels from whence it had become a matter of great difficulty to procure any evacuation whatever. In general aspect he was white, haggard and emaciated, yet his appetite was good and his respiration free. On manipulating the lower abdomen and pelvis, the attention was arrested by the presence of a large and very solid growth rising from and filling entirely the left Iliac fossa, and projecting boldly from thence in a round tower shape into the corresponding hypochondrium. Passing the hand over on the dorsum of the left Ilium it was found covered thickly with the same non-elastic tissue. In the right Iliac fossa was another tumor of the same character as that on the left side, but occupying only the pelvis. On the upper, and frontal aspect of the trunk were discovered several of the same degenerations. Four or five, varying from the size of a filbert to that of a pigeon's egg were scattered over the anterior and superior surface of the thorax and neck. On the left temple was situated one of these indurations of the size of a hickory nut, and a much smaller one on the occipital protuberance. A careful examination of the liver detected a feeling of extraordinary hardness in the free border of the large lobe. A digital exploration per anum announced the existence of an induration and thickening in the parietes of the rectum about $1\frac{3}{4}$ inches from the anus. This seemed to be a complete investiture of the organ, and produced nearly or quite entire occlusion when in a quiescent state. By firm pressure which produced much pain, an opening could be forced through the natural channel about $\frac{3}{8}$ th of an inch in diameter. This change in the structure of the rectal wall seemed strikingly like the enlargements more exposed and was believed to be the same in character. By some it was pronounced *scirrhus*—but it was *too hard* for *scirrhus*. The intellect was clear—the tongue clean, and digestion seemed to be performed with integrity. My Prognosis was *death*—and warning was given the patient to look for it under circumstances the most aggravating. The irritation by pressure of the morbid growths upon the large nerves supplying the lower extremity of the left side was already

such as to induce not merely pain, but intense agony; and the constant recurrence of violent spasmodic contraction of the muscular coats of the intestinal canal, by reason of inflation from pent up gases, produced intolerable *colics*. Any attempt to relieve these sufferings by either the forms of opium which are in common use—or which he had tried, was followed by the most prostrating nausea, vomiting, and almost irretrievable constipation. To guard against entire occlusion of the obstructed portion of the alimentary tube, by which he and his advisers were kept in constant terror. His mouth, œsophagus, stomach, small and large intestines were made the constant thoroughfare of all manner of pills, potions, boluses and cathartic compounds; and yet the awful climax seemed constantly approaching. As the hopes of the victim were now fast fading away in all remedial means, and entirely extinguished, so far as boasting charlatanism was concerned, he requested me to take the entire charge of him and make such appliances as I deemed judicious, and most conducive to his comfortable exit from what was to him emphatically a “vale of tears.”

For present relief chloroform was prescribed—in liniment over all the painful limb, and inhalation of the pure article to “Point-comfort.” For permanent and reliable means of relief, I had—

1st. The substitute for McMunn’s elixir of opium, prepared after the formula given in Braithwaite’s Ret.

2d. To counteract the constipating effects of this drug, he was directed to take ʒij each day of *ox gall*, and confine himself to such articles of liquid diet as contribute to a soluble state of the bowels.

3d. To be ready in all emergencies for relieving the bowels from undue accumulations, I constructed catheters and bougies, of appropriate size, of *gutta percha*, which were passed through the constricted portion of the canal, the former being made the duct for alvine evacuations. By the adoption of this plan, he was soon brought into a state of comparative comfort. The opiate was taken without regard to quantity, but was graduated by the degree of pain, and the Fel. Bovin. acted like a charm as a solvent of the contents of the alimentary canal. Indeed, it was not long after he commenced the free use of the latter article, before he found himself able to disregard dietetic regulations to a great extent, and eat and drink that

which was most agreeable; and yet by the use of a pump for injecting warm water, followed soon after by a gutta percha conductor, procure daily and copious liquid discharges.

But daily and hourly did the process of morbid change go on in the localities heretofore specified. Steadily the tumefaction increased, especially in the pelvis, the abdomen, and on the temple. At length there came a stage when the remaining soft-solid tissue belonging to the patient, began to disappear with astonishing rapidity, and the fluid secretions of the internal organs to run off without "let or hindrance." Although to all beholders he appeared almost a living skeleton before, he was now seen manifestly to *grow poor* from hour to hour. In a few days a shadow was all that was left of our friend, and he succumbed to the great destroyer, with his mental eyes wide open, but a striking instance of human attenuation. His death occurred on the last day of April, late in the afternoon, and a post obit. examination was made at ten o'clock the following morning, in presence of Drs. Hurxthal and Whiting, of Massillon, Dr. Slusser, of Fulton, and Dr. McAbee and myself, of this town. The following notes were made of the autopsy.

External appearance, that of a skeleton, with integument drawn tightly over each individual bone.

Tumor in left temporal region first dissected out. It was found firmly adherent, apparently growing upon the bones of the skull, which it covered. The periosteum was entirely gone underneath the mass, yet the structure of the bones was not materially changed. There was, however, slight softening of the external table of the os frontis. On an incision being made through the integument the growth appeared enclosed in a non-adherent envelope, which appeared to be the temporal fascia. In its longest axis (antero-posterior) the tumor measured two and a half inches, vertically two inches, and had an average thickness of one inch. Structure, *osseous* and *spiculated*; the spiculæ standing at nearly right angles with the plane of the bones from whence they sprung. The abdominal and pelvic cavities being exposed, the most prominent feature which presented itself, was a large body with a smooth and shining surface, filling the left half of the upper portion of the cavity of the pelvis and rising boldly into a great promontory in the hypochondrium of that

side. This was exceedingly indurated, and on attempting its removal was found to be connected with the entire inner surface of the left ilium in precisely the same manner as the tumor on the head was with the bones of the skull. Its structure was osseous, and spiculated like the former. Its color yellowish white. This pathological specimen measured before removal six and a half inches in its vertical axis, and three and a half antero-posteriorly. In the right iliac fossa was another growth of precisely similar pathological character, and attached to the bone of that side in the same way as the two already described. This measured three inches in its vertical axis, and one and a half in average thickness. Scattered along over the frontal aspect of the last two lumbar and sacral vertebræ were indurated growths bearing the same general character as the larger ones, and varying in size from that of a pea to a hickory nut. They were osseous. The presence of so large a quantity of foreign material in the cavity of the pelvis, of course reduced its capacity to retain in a natural position its appropriate contents, and much suffering was the result. The bladder was covered on its exterior surface with reddish colored indurations, varying from the size of a small shot to that of a pea, very hard, but not yet bony.

The rectum, although firmly secured by adhesions, was carefully taken out of its place, and found to be thickened throughout its entire extent. At the distance of one inch and three fourths from the anus it was found invested in its entire circuit with a very hard deposit three eighths of an inch in thickness, and extending from the point already designated, one inch and a half upward in the long axis of the tube. This we believe to be *osteo-sarcoma*, for although the osseous structure was not so manifest as in the larger tumors, yet on cutting through the diseased mass the cracking sound as of fracture in minute spiculæ of bone was distinctly heard, moreover crepitus was also perceived on pressure between the fingers, and the roughness of incipient ossification could be felt.

The liver was studded over most of its convex surface, and much on its opposite side, with degenerations. These were lenticular in form, and varied in size, from that of a split pea, to a large sized seed of the *strychnos nux vomica*, which last body in many respects they strikingly resembled. All these degenerations had rais-

ed margins and depressed centres, forming little basins. The impression created by a view of them was, that a purulent fluid had existed underneath the envelope of the liver; that this had been nearly absorbed, and the covering raised by the presence of this fluid, had fallen back into the pit which the absorption had created. But all were alike solid, and all parts of each individual degeneration were alike solid, and all approximated bony structure so clearly, as to be pronounced the same in pathological character with those portions of the decidedly osseous tumors which had not yet become entirely converted into that tissue. The free border of the the large lobe of this organ was entirely changed. Color, pearly; texture, apparently cartilaginous; but upon handling and cutting we discovered the same impassibility and crepitous, (the latter very slight) which characterized all the other morbid specimens not *decidedly* osseous. The gall bladder was much thickened, and the walls *solid*. This morbid character of the structure of the liver extended upward upon and through it to the height of three inches, and in some points nearly four.

The diaphragm was covered upon its inferior surface with the same reddish colored elevations as those found distributed over the urinary bladder. In the pancreas was found an unequivocal osseous formation in size equal to a small garden bean, and similar in form. Adhesions abounded throughout the entire abdomen and pelvis, which of course rendered the dissection tedious, and a perfect exposure of the pathological anatomy difficult.

I would, however, take occasion in this place to express my sense of obligation to my young friend, Dr. H. M. McAbee, who kindly took upon himself most of the labor, and who so performed it, that we have been enabled to preserve a number of very valuable pathological specimens, which I have the pleasure to present for your inspection. The induration and enlargement on the dorsum of the left ilium was not removed: but a dissection was made over the crest of that bone, which exposed a fan-shaped expansion of the diseased tissue connecting the mass within the cavity with that upon the external surface of its parietes. This external tumor was large, and had all the characteristics of that described as springing from the opposite side of the same bone, and no doubt was *osseous*. The same

was undoubtedly true of those located on the superior and anterior portion of the thorax and neck, as also that upon the occiput.

To sum up this already protracted and somewhat verbose report, permit me to remark, that I regard the case as a very remarkable one. I know of none on record in which such a vast amount of osteo-sarcoma is described as existing at all in a single individual; then the extreme rapidity with which the large masses of this material increased, is matter of surprise to me. Other items of interest will suggest themselves to your minds.

I close this paper with the enquiry, whether with a full knowledge of this proclivity to morbid osseous development in the human body it might not be made to cease, if in its early stages this perverse disposition was subjected to such remedial means as would be the result of a thorough knowledge of the *chemistry of man*.

ART. II.—*Communicated*, By L. M. WHITING, M. D.

SUDDEN DEATH IN THE PUERPERAL STATE.

CANTON, July 28th, 1853.

Dr. HOWARD—*Dear Sir*: Some days since, as I am informed, the Secretary of the "Stark County Medical Society" forwarded to you a report of a case possessing some interest, and which was communicated by myself at the last meeting of that body. Associated with that case was another, which will doubtless be regarded by yourself of some interest, and to those who feel any special interest in the investigations with reference to *sudden death in the puerperal state*, it may be considered of sufficient importance to "make a note of."

Mrs. S——, wife of the patient who was the subject of the foregoing report, was a short, round, compactly formed woman, of twenty-eight years; had been married about six years, and was the mother of two healthy daughters—one four and the other two years of age. When I first saw her—about the first of January last—she was advanced to the sixth month of pregnancy, and then engaged in hourly attendance upon her husband, by day and night. By this time his case had reached a degree of malignancy which rendered many offices of kindness very offensive to the attendant. Yet the duties of nurse were assumed and performed by her with the great-

est cheerfulness, and in spite of all the remonstrances her friends and himself could interpose. This course was pursued during the entire remaining period of gestation—the circumstances constantly growing more and more unfavorable for her well-being. At length the time of her accouchment arrived, and I was much gratified to find her lying in a room separated, as effectually as could be, (on the same floor) from the rapidly declining sufferer who had so long engrossed her entire thoughts and personal care. Her labor was somewhat severe, though not tedious, and concluded without any untoward occurrence. The next day she was very comfortable—but on my visit, judge of my surprise to find her husband sitting, bolstered up in a large arm-chair, in her bed-room. This I regretted exceedingly, but as the circumstances were peculiar I did not materially complain—supposing of course, that he would soon become fatigued, and be carried back to his own apartment, in a remote part of the house. But if I was surprised in the morning, I was thoroughly astonished in the evening, by finding him fairly domiciled in a large parlor communicating directly with the dormitory in which lay his wife. I immediately expressed my fears to her friends of this proximity, but she soon learned, by some means, that his removal was contemplated, and interfered with a most positive prohibition. In consequence, he was permitted to remain. On the third day after her confinement, she had the slightest possible chill, followed by pain in the uterus, and fever, both of which, in a few hours became intense, the former radiating over the most of the peritoneal surface, which was intolerant of the slightest pressure. Being on the lookout for trouble of this sort, we were prompt in the adoption of remedial means, and had the satisfaction to see them successful. In a very few days there seemed to be an entire extinction of the puerperal fever, and all interested felt free of apprehension. She was well. On the ninth day she arose, walked into her husband's room, remained some time, held her child in her arms while there, a portion of the time, and finally walked back to her own apartment. This was, however, a day of great trial to her feelings—her husband had, during her confinement, failed very fast, and the change startled her into the conviction that he must die very soon, and she wept a great deal, yet rested during the night, and in the morning seemed more

cheerful and better than at any time previous. Her brother, (Samuel Krider, Esq., of the last Legislature,) went into her room and received the assurance from her that she felt very well indeed, and that she intended to sit up nearly or quite all day. I saw her and husband early in the morning, but supposing her to be asleep, and having an urgent obstetrical call four miles in the country, I did not arouse her. About nine o'clock A. M., her mother went to assist her in getting up. She handed her a *pot-de-chambre*, which she was expected to use in bed for urinary evacuation. Just then Mr. S. made a sound of distress, when she said to her mother—"Go out to him—he wants something; I can help myself perfectly well." The old lady did as requested—left the room, and as she went out closed the door. But a moment had elapsed, when those in the adjoining room heard a heavy fall, and running instantly, found Mrs. S. lying on the floor, the bed clothing still enveloping the lower extremities, and apparently *dead*! She was immediately raised into bed, and one of her friends in attendance, supposing her to be in a fainting state, asked her if she would have water, to which she replied no, then breathed once or twice, and stopped forever! One or two physicians of the town were called in as soon as circumstances would permit, but nothing essential was done, each regarding death as certain.—Being absent, in attendance on the case as above stated, I did not learn the facts until two or three hours had elapsed; when I reached the scene of disaster, of course all was "stark and cold." I learned that the urinal had not been used, and could find no signs of injury whatever, from the fall. The peculiar circumstances of the family rendered a post mortem examination impracticable. What was the cause of death I do not know. There had been no drain of the blood-vessels to induce a belief in *heart-clot*, and it would seem fanciful to refer the fatality to the introduction of air into the uterine sinuses. It was a terrible blow to the already dying man, whose hopes for the well-being of his little ones were all centred in the assurance that their mother was young—remarkably healthy and full of the milk of human kindness and maternal love. He lingered yet four days, and then joined his most faithful and cherished friend in that land where "there shall be no more death, neither sorrow nor crying."

By the above statement you perceive I was engaged in a case of midwifery in the country, at the time the sad catastrophe occurred.

This woman "did run well" for three days ; she was then seized in the latter part of the night with violent pain in the left lower extremity. In the morning her husband came to town to inquire what should be done for the pain in the limb—remarking at the time of consultation that she had some two or three months previous suffered severely with a precisely similar pain in the arm and shoulder, but on using some stimulating embrocation it disappeared entirely. He was directed to return immediately, and administer a free dose of morphine. Before he arrived at home, however, he was met by a messenger sent post haste to inform him and myself that the pain had shifted its locality, and was now in the chest, and as she thought, threatened her with immediate death. The messenger came on for me, and the man went home and gave the morphine. When I arrived I found her very comfortable—not much pain anywhere. The abdomen and pelvis was carefully manipulated—no sign of trouble there ; no fever ; lochia not abundant, but steady. I regarded the suffering as neuralgic decidedly. There was a *little* secretion of milk. Previous to the labor, she had, during the night, a diarrhoea, but nothing like it after. At this visit I ascertained that she had been impressed with the idea that she would never recover from this trial. She was a woman of decidedly nervous temperament. Had borne three children—the youngest seven years old. Cathartics, when necessary, operated kindly. Sometimes there was excessive tenderness on pressure, and pain, on motion, in the lower abdomen—at others there was none ; opiates always controled it when it existed. But she gradually declined, and died in twelve days. Being satisfied she would die, she refused to take such medicines as I thought calculated to sustain and save her, and I quit her entirely two or three days before her death ; before doing so however, I called other medical counsel, who declared they could see no good reason why she should not recover. What destroyed her I do not know, it is proper, however, to remark, that about this time I had several other patients who suffered, in child-bed, threatening symptoms ; there were several cases of erysipelas scattered about, and two or three weeks previous to the occurrence of this case, I was called in counsel over a case of unequivocal puerperal peritonitis, in its hopeless stage, only two or three miles from the last.

Yours truly,

ART. III.—CONTAGION.

Proof-Essay from "General Pathology." By Dr. A. de LEZCZYNSKI, Columbus, Ohio. (Now in progress.)

When we hear the name of a fellow-being the question naturally suggests itself—"who and what is he?" There are many subjects, although known as long as human record reaches, which have not been defined, and at present are not known better than centuries ago. And why is it thus? *Because human infallibility and wisdom have decreed it so.* In place of becoming the scholars of nature and the investigators of her actions, men had the insolence to *regulate* her movements by hypothetical laws, *invented* upon the strength of *superficial observations*; and herein none has been stronger than our—the *medical profession*. From its divine origin it sunk until, at a time, it was hardly more than *privileged charlatanry*. But, thank God, a brighter morn is dawning! And what has been the result—have we progressed and gained in experience? No—far from it—with unlogical reasonings and deductions, the consequence of mal-perceived and mal-construed observations of Nature's actions, we became the losers, morally and physically. A good instance is given by the subject "contagion." There are many hypotheses as regards its nature, but schools and scholarships who enriched us with the former, have still given no clear definition of it. There are parties who deny the *contagiosity* of certain diseases, which they estimate to be only *infectious*; there are yet other parties who believe certain diseases to be neither *contagious* nor *infectious*, but *portable*,—but what they understand by *contagion*, *infection*, or *portability*, they have not had the goodness to inform us of.

Let us review the words etymologically:—*Contagium* is formed of *con* (cum) and *tango*. The former word signifies *with, through*, whilst the latter means, 'I touch.' In the sense the medical profession uses it, it conveys "*the introduction of an infection into an organised (not also unorganised!) body, by means of bodily, therefore actual contact.*" Any disease capable of reproduction, by transmission of its germ, we call logically, "*contagious.*"

Infection is likewise formed of two words—of *in* and *facio*. The former means, *in, into*; the latter *I make, I do, I cause*. We under-

stand by it the introduction of a mass—of an agent, into the human body exclusively. The ancients understood by it not only *this*, but also the introduction of other matters into other bodies—as for instance, the introduction of colors; wherefore, by *infection* they also understood the *process of dying*. Literally, contagion and infection mean the same thing, pointing only etymologically as to the *manner* in which this takes place. So some schools have understood it when they say, the former, (contagion) can only be communicated by *actual, immediate contact*, from man to man; whilst the latter, (infection) will be communicated by *mediate contact*. Some schools reverse the definitions, in opposition with the etymological import of their names.

Portable comes from *portāre*—‘to carry.’ Logic teaches when a portable matter causes a specific disease, *it must be a contagion*.

I believe there was no necessity for these subdivisions, and all we gained for our labor has been *confusion*. From the preceding we conclude that contagion and infection imply the same matter—contagion, and the only difference exists in the one being the name for *general* whilst the other is the name for *fixed* contagion.

We understand by contagion a noxious principle, which, engendered in the animal or human organism, and transferred to another, or others of the same or higher species, will cause, always, *the same disease*, of which, primarily, it has been the product. We shall endeavor to delineate its *genesis*. When atmospheric and telluric noxious influences produce upon the organism so great a chemical change as to cause a disturbance of functions of the human fabric, then we call this abnormal state disease. The abnormal, like the normal state, has its products and educts. When the functions are changed, the organic structures must have been changed, wherefore an alteration of the products and educts of the body. The more intense the organic and functional changes of the body are, the greater will be the abnormal state of the products.

When during the prevalence of endemical or epidemical disease, many persons, attacked by it are enclosed in relatively small rooms, to which not enough fresh atmospherical air can be admitted, then these rooms will not be filled with carbonic acid, but with animal products of exhalation, and perhaps those of the voided excretions, which now will putrify, and not only produce the original abnormal process,

but also a far more virulent one, causing either dyscrasies of the blood, and thereby an affection of the nervous centres, or they affect the latter primarily and the blood secondarily. The new product we call *contagion*, the manner in which it originated its *genesis*.

It is not requisite that contagion be generated only in enclosed rooms. If many individuals, under similar conditions, are attacked in a low malarial region, where the change of atmosphere, on account of its geographical position, is impossible, or difficult, (as in valleys to which the winds have no access,) and where perhaps yet planetary influences lend their coöperation, (as the hot rays of the sun, promoting rapid decomposition,) then contagion will likewise be generated, and will be more lasting, as it finds a ready nucleus in malaria—of this anon. This I conceive to be the process in which contagion of wide spread epidemics is produced. In this manner the following and other sporadic and endemic diseases change into contagious epidemics—yellow fever, scarlatina, variola, the plague, *tussis convulsiva*, *cholera Asiatica*.

A contagion, once generated, on account of its more homogeneous nature, acts entirely different from the mother-disease, and when carried to other places, appears there as contagion, provided certain circumstances exist there favorable to its existence. It passes not through the same process described before, nor will it need those peculiar favorable conditions as were required for its genesis. It appears as contagion and will exist as such until excluded by other causes.

But it is by no means only the animal organism which contagion may affect. When introduced into a new place, it affects the soil. This is proved by contagion becoming an endemic disease in a place where first it was introduced as a contagious epidemic. (The revelation of these laws belongs to the province of Natural Philosophy.) In this manner, the yellow fever, a native of the West Indies, has become a native of some parts of Spain. It is not generated by the growth of American maritime plants, in places where now it is an endemic, as medical philosophers tell us. If so how does it happen that *variola*, a native of Europe, has become a citizen of this continent? Are there also certain plants, on whose presence the existence of the latter disease depends?

In order that a contagion may be received and regenerated, the soil must be as much predisposed to it as the animal organism. In this manner we can understand why some places are exempt from an epidemic, whilst others are visited by it terribly, and why an epidemic likes to linger in some places longer than in others. The most fruitful hot-beds for contagion are malarious districts—malaria forming the nucleus to the introduced, and the associate of the new forming germ. In order to understand better the relationship between contagion and malaria, we shall speak about the genesis of the latter.

Those districts of the earth where a luxurious vegetation exists, and where, on account of their position and different influences, decomposition is carried on more rapidly, are generally situated low, therefore well watered. They mostly lay in situations where heat and sunlight support rapid oxydation—vulgo, decomposition. The product of this rapid oxydation are exhalations of the oxydizing bodies—in other words, minute particles engaged in a transitory process, which, on account of their lightness, will be mixed and diffused in the air. Simultaneously with these exhalations, vapors arise, into which, by the aforementioned causes, water has been reduced. On account of their weight, these exhalations cannot rise above a certain height, and here, with the proper quantum of moisture, under the influence of the rays of the sun, they decompose still further and more rapidly. At night, on account of their gravity, they fall—with their solvent, in form of fog, supported only by an under-current of air—so low as to become hurtful to animal and other organisms. If the latter can not assimilate these matters, disease will be the result. These matters we call *Malaria*. This word is Italian, and signifies *bad air*. *Malaria* and *Miasma* intend to express the same. *Miasma* means defilement, contamination, from *miaño* to color to defile, to contaminate, and is related with *mingo* to urinate.

When malaria and the products of animal organism unite, then the new product receives power to infect the soil, in virtue of its *planetary* origin, and the animal organism in virtue of its *animalic* descent. These new products are contagia.

Contagion we divide into *general* and *fixed*. To the former belongs

the virus of contagious epidemics ; to the latter those whose origin is spontaneous, autochthon, as syphilis, scabies. We discriminate in contagia—

1. The body, the basis ;
2. The animating principle ;

The body of the contagion may be either,

- a. Drop-like fluid—as in syphilis, the chancre-matter ; in hydrophobia, the saliva ;
- b. In the form of vapor—as in yellow fever ; putrid dysentery ;
- c. Or gaseous—As the contagion of scarlatina ; or
- d. Appearing in all these forms united ; (variola.)

The basis of contagion appears to act always alike ; but its nature, in different places, climates, and at different times, is subjected to certain changes. An instance of this is afforded by syphilis, the contagion of which, according to old authors, appeared at its first *débüt* as a gas. After it came gonorrhœa, as a new character.

Of the animating principle little is known, but it seems related to positive electricity. This doctrine seems to be sustained

1. By the fact that it is always perceived by the senses of smell and taste, which is also the case by galvanism. If we introduce two pieces of different metal into the mouth, one above, the other below the tongue, and bring them into contact with each other, we perceive a salty taste.

- 2d. By the fact that ideo-electrical bodies are the best conductors of contagion—as glass, silk, wool, resin. The conductor or medium of that contagion, the basis of which appears in a vaporous or gaseous form, *is the air*—as in variola, the plague, cholera. The conductors or medium of that kind of contagion, the basis of which appears as a drop-like fluid, are, without exception, compact bodies, as silk, wool, etc. But compact bodies can also transport the former form of contagion.

The capacity of the air, as a medium, seems to be increased or decreased according to the difference of temperature. In conformity with this law, the *plague* will discontinue in a very high degree of heat.

In order that a contagion can be reproduced by the organism, it must, by its mediums, be deposited upon mucous membranes

—natural or artificial ones. Chancre-matter, when brought in contact with the epidermis, will cause it, but reproduce itself if the epidermis is removed, or when brought in contact with mucous membranes. Contagia cannot reproduce themselves before they have arrived at maturity, some only at the state of their deflorescence, as typhus, variola. Some of the contagia will attack the organism only once, whilst others, having invaded it once, increase thereby the receptivity for it, as we observe in syphilis.

There seems to exist a hostile disposition between contagia—that is, they exclude each other. According to this law vaccine protects against variola; measles against tussis convulsiva—some think vaccina very protective against the latter disease.

There is one thing yet I should like to speak of. I know I am treading upon forbidden ground, following examples I must condemn—I mean *hypothetical* reasoning—but the hypothesis I wish to forward is based upon facts. Should I be *wrong* I beg to be forgiven; if *right* perhaps others will investigate further, and develope a law from the present hypothesis.

While perusing Humboldt's "Cosmos," I met with the chapter on animalcula and infusoria. When we reflect upon the enormous quantity of these microscopical beings, the question forces itself upon us—"can these beings have any bearing in the production and transmission of diseases and contagions?" I should answer, "I firmly believe so." Humboldt says: "Although the surface of the ocean is less rich in living forms than that of continents, the oceanic depths exhibit to the astonished sense (certainly per microscope) a multiplicity of animalic life." Again, "the abundance of these maritime animalcules, and the animal matter yielded by their rapid decomposition, are so vast, that the sea-water itself becomes a nutritive fluid to many of the larger animals."

Ehrenberg investigated, and Humboldt endorses the following: "in the animal kingdom those forms which we term microscopic occupy the largest space, in consequence of their rapid propagation. The minutest of the infusoria—the monodidæ—have a diameter which does not exceed $\frac{1}{3000}$ th of a line, and yet these silicious-shelled organisms form, in humid districts, subterranean strata of many fathoms in depth. Although the existence of meteoric infusoria is

more than doubtful, it cannot be denied that in the same manner as the pollen of the flowers of the pine is observed every year to fall from the atmosphere, animate infusorial animalcule may likewise be retained for a time in the strata of the air, after having passively been borne up by currents of aqueous vapor."

Again, de Barre, Beckwith and others, melted flint, and immediately as it cooled, before any insect had time to deposit its eggs within, they let a galvanic stream into the inanimate dust, calling by it myriads of animalcules into life, which afterwards propagated themselves. Were they produced by spontaneous generation? By no means! (Compare Ehrenberg on the revival of animalculæ that had been dried during a space of many years.)

My deductions from the said are as follows:

1. As in the animal kingdom those forms which we term microscopic occupy the largest space, they form also the largest aggregate of matter.

2. Whenever there occurs, from one cause or other, an unusual mortality among the microscopic beings, there must necessarily be a reaction upon the state of health of the larger animals, in consequence of the decomposition of these infusory bodies.

3. The unusual large decomposition of animalcules, in connection with exhalations of decomposing vegetable matter, are the source of such diseases of the blood and nerves as appear in general contagia, engendering in the human body changes similar to their own.

4. That when these contagia are carried by the air, and other conductors to places not yet infected, and where animalcules are very numerous, it will either first affect the latter, and secondarily mankind or *vice versa*.

Gardiner, in his Medical Chemistry, when speaking of malaria, says: "I do not however agree with Prof. Daniell, and others, that sulphureted hydrogen is the malarious body, but believe that sulphur is a component of a certain unstable organic body, which constitutes the poison." This organic body may be obtained by precipitating the vapor from a marsh, in the morning before sunrise, and it blackens sulphuric acid. It consists of sulphur, carbon, hydrogen, and probably oxygen. (Is there no nitrogen in it?) It readily decomposes, emitting a *putrid* odor, (and contains no nitrogen !!) and appears to

be decomposed by the rays of the sun. It is destroyed by fire—does not rise high in the air—is decomposed by plants which appear to remove its water, an essential ingredient of the body. My opinion is that the malarious body is animalcules in the putrid state. In favor of this stands the *putrid odor* Gardiner speaks of.

Some may deny that diseases of the lower animals can be transmitted to man, or vice versa. I answer that at a time when stomatyphus (*Stomacacé Fegar*) was endemic in certain places, I have seen *dogs* and *cats* affected by the same disease. Here we see the same cause produce simultaneously the same results in man and the lower animals. I have noticed further that saliva of a man laboring under hydrophobia, introduced into the circulation of a dog, can cause the same disease in the latter.

This proves that certain diseases of animals, transmittible to man, are retransmittible from man to animals. From this we deduct that pathological processes of animalcules transmitted to man, can be retransmitted from man to animalcules.

As another proof that an abnormal mortality of infusoria can be the cause of frightful mortality of man, I am reminded of the occasional contact of the sea with sweet water. It has been generally taught that the dreadful malaria produced by this union is caused by the action of the salt water upon the vegetation of fresh water marshes. Experiments deny this. Malaria is caused here by the great mortality and decay of both the infusoria of the salt and the fresh water. Neither can live in the strange element. A similar observation can be made by transmitting small fish from sea-water into sweet water, and vice versa. Neither will live long in the strange element. Upon this law I am relying when giving the above explanation.

Lastly, I beg not to be misunderstood. I do not intend to say that contagion is the product of putrescence of an abnormal number of infusoria. I only say that this can be the cause of epidemics or epidemics, and that, in order contagion may be formed, those circumstances must take place enumerated when giving the definition of contagion.

ART. IV.—*A newly discovered principle in the Urine.* (From the German.) By Dr. A. de LEZCZYŃSKI.

Stædeler speaks, (in Wœhler's and Liebig's *Annal*, vol. 11, and *Frorieps' Tagesb.* No 308,) of a newly discovered principle in the

urine, which he names *phenylic* or *karbolic acid*, which, he tells us acts as a violent poison upon the organism of man and animals.

The *hydrated karbolic acid* is a colorless, oleaginous fluid, its smell resembling castor—its taste is burning. When brought in contact with the skin it causes the latter to corrugate to a degree resembling deadness. Animals to whom it has been administered internally, become very restless, and die convulsive.

Brought into contact with blood and albumen it causes them to coagulate. It is powerfully antiseptic and removes from putrifying matters and excrements their smell. The manner in which Stædeler procured this principle is as follows: he mixed recently voided urine of cattle with hydrate of lime, and added hydrochloric acid, after which he subjected the whole to distillation. The latter process gave a milky fluid of an extremely unpleasant odor, from which he separated a few drops of oil of a tenacious nature, and yellowish, or yellowish-greenish color. By repeated rectification he succeeded in condensing the volatile matters still held in solution by the water, and the result was an oleaginous yellowish fluid, which sank in the water passed by distillation, and which, for the greatest part, consisted of *karbolic acid*.

Another principle related and frequently united to this acid, and which is highly carbonized, he names *taurylic acid*. They are distinguished from each other by the higher boiling point of *karbolic acid*.

This experiment has proven besides, the existence of *two other volatile acids*, in the urine, which Stædeler calls *damaluric* and *damolic acids*, but as they are found likewise in the perspiration and the fatty acids, they cannot be said to be peculiar to urine.

COLUMBUS, O., July 1853.

ART. V.—*Note-Book Gleanings.* By SAMUEL C. MENDENHALL, M. D., Bloomfield, Warren co., O.

PLACENTA PREVIA—VIOLENT UTERINE HÆMORRHAGE—PERFORATION OF THE PLACENTA BY THE CHILD'S HEAD.

Aug. 20th, 1852. Was summoned in haste to see Mrs. C., aged 28; residence, Hilliar township, Knox co. Found that while atten-

ding to her domestic duties, uterine hemorrhage of the most alarming character had occurred. Some three hours had elapsed from the occurrence of the attack before I reached her bedside. The bed and bedding were soaked with blood; pulse at the wrist scarcely perceptible; countenance exsanguine; prostration extreme; uterus contracting feebly and irregularly. Considering the danger eminent, I immediately adopted the most energetic means for arresting the hemorrhage, regardless, for the time being, of every other consideration. Ligatures were drawn tightly around the upper and lower extremities, close to the axilla and groin; cold water perseveringly applied over the hypogastrium, and *large* doses of acetate of lead were administered, with a little morphine occasionally. The hemorrhage began presently to subside, and in twelve or fourteen hours ceased. She was in the fifth month of her pregnancy, and had suffered from severe flooding at both her previous accouchments, but never before during pregnancy. Rest, in a horizontal position, for eight or ten days, and a careful avoidance of severe exercise, were enjoined, and I heard no more of her until

Thursday, Jan. 13, 1853. I was again summoned, and found that she had been in the care of two midwives, since the preceding Monday. Irregular pains, of an ineffectual nature, had harrassed her during the whole time, until Wednesday evening, when they ceased entirely. Her strength was nearly exhausted; the parts, on examination were found relaxed, the placenta presenting at the mouth of the uterus. There seemed to be a necessity for prompt delivery; ergot, in full doses, was administered; the uterus began to contract pretty strongly, and about 8 o'clock, P. M., she was delivered of a female child weighing nearly eleven pounds—apparently lifeless, but by the use of the warm bath and artificial respiration, animation was restored, and the child is now (Aug. 6,) living.

Upon attempting to remove the placenta, it was found adherent, and on introducing my hand into the uterus, to my astonishment I found it perforated by the passage of the child, it being attached a little to one side of the os uteri, and so firmly adherent that it was with the utmost difficulty that I succeeded in peeling it off from the maternal surface; it seemed indeed to be almost continuous in structure with the substance of the uterus. Her recovery was tardy, and

the small portions of the placenta that were not removed, caused considerable annoyance, from the fœtor they imparted to the lochia.

The hemorrhage, in the first instance, was doubtless caused by the development of the gravid uterus separating, in part, the placental attachment—the subsequent unusually firm adhesion consequent on such separation. The rupture of the placenta was produced by throes such as are seldom witnessed. It would have been better, in my opinion for her to have been delivered when the hemorrhage first occurred. What say the “*Dii majores professionis*” on preventing abortion in case of uterine hemorrhage depending on placenta previa?

DYSENTERY.

August 21st. 1852. I was called to visit Mr. J., aged 48 ; nervo-bilious temperament; rather a feeble constitution ; residence near Sunbury, Delaware co. Found him laboring under a severe attack of dysentery, popularly called “flux,” then prevailing epidemically in that region ; pulse 115, small and quick ; countenance anxious ; eyes sunken ; dejections, dark, grumous, and mixed with the *debris* of broken down tissue, horribly fœtid, and occurring six or eight times per hour. Had been under the care of some of the “Botanic crew,” until “composition,” “lobelia,” &c., failing to prevent the disease from progressing from bad to worse, his friends insisted upon a change of treatment, and I was sent for. One of the misnamed “doctors” was by his bedside when I arrived. As I took no notice of him whatever, proceeding immediately to examine and prescribe, he seized his medicine case, and with imprecations dire on the “calomel doctor,” left the premises.

Ordered him to take a powder composed of half a grain of morphia, two grains of ipecac, and three grains of tannin, every six hours. A thorough application of a saturated solution of camphor in spts. of turpentine, over the stomach and bowels, every two hours; an injection of kreosote suspended in water, three drops to the ounce, to be given once in four hours, until the fœtor of the discharges was corrected, and then to be replaced by injections of acetate of lead suspended in mutton broth. No cold water allowed—mutton broth being the only drink permitted.

Under the above plan of treatment, (modified, of course according to circumstances, as the disease began to give way) he gradu-

ally recovered, so as to be able in six or eight days to sit up in a chair, and in about three weeks resumed his usual employment.

Dysentery, as it prevailed in this portion of the State in the summer and autumn of 1852, was far more difficult to control than the same disease the preceding year. There was an unusual tendency to "putrefaction of the fluids of the body," if I may be allowed the use of such a phrase. The course of the disease was violent, rapid, and in many instances fatal, especially when occurring after measles, which visited us epidemically, early in the season. I cannot, nor can any of my brethren in this region, boast in the language of one of your contributors, that "none of our patients have bit the dust." In many very unpromising cases, however, I am confident that a system of treatment like that given above, has saved life. Opium, kreosote, turpentine, camphor and acetate of lead, judiciously used and combined with proper adjuvants, will do much to control this fearful scourge, yet the experience of those of my brethren who battled with this agonizing disease in 1852, will bear out the assertion that too frequently our best efforts were unavailing, and that the epidemic was characterised by a malignancy and obstinacy seldom witnessed.

ART. VI.—ON THE ANALYSIS OF THE BLOOD. *An extemporaneous Discourse; delivered before the Cincinnati Medical Society.* By JOHN LOCKE, M. D., President of the Society.

GENTLEMEN OF THE SOCIETY: Without attempting to enter into the subject of the physiology or pathology of the blood, I shall merely undertake to give you a plain account of the analysis of that fluid, by Dumas, as modified by Andral.

The manipulations will be such as have succeeded in my own hands. The analysis as given by Andral does not profess to be an ultimate one—for it neither gives the amount of carbon, hydrogen, oxygen or nitrogen; nor does it give the various salts, the iron, the phosphorus, or the sulphur. It merely proposes a very simple separation, which shall answer mostly pathological purposes; it proposes to show the quantity of the fibrine, the serum, the globules, and the water. The process is made so simple by the distinguished men who have devised it, that I have recommended it as a first encouraging process to new beginners in organic chemistry.

The principles on which it depends are two—1st. That you have given the whole of a compound, containing two elements, and can, by analyzing a part of it, obtain the ratio or proportion which they bear to each other ; then, by calculation, you can determine the separate quantities in the whole mass ; 2d. That if you have a compound substance, given in weight, and can, by analysis, determine all except one of the ingredients, that one can be obtained by subtracting the sum of all the others from it, or algebraically—Let a = the whole quantity, (known of course) and let that be composed of the unknown quantities x , y , and z —viz : $a = x \times y \times z$; now if by any means you can determine the value of x and also the value of y , then $a - (x \times y) = z$, and z becomes known. But this principle is so simple that “making x ’s about it” only makes it more obscure. If a market woman has a mixture of peas, beans, and corn, the whole weighing 10lbs., and should find out that the peas and beans weighed together 7lbs., she would not be long in finding out how many pounds of corn there were. But to the analysis :

The blood for the purpose need not be drawn in any peculiar manner, though it ought to be left at rest until it coagulates. Then will be found floating a transparent, though not colorless serum, upon the top ; this serum is to be carefully decanted off, and if, from any mismanagement, a little portion of red globules are still intermingled, which often happens, it must be left until these entirely subside, which will ultimately take place. The transparent serum is then again decanted, and the residue returned to the clot. It must be recollected that this separated serum is not an attempt to get all the serum from the blood, for there will still be some diffused through the clot. The effort is only to attain a sufficient portion of it to operate upon. The amount of the remainder is to be obtained in a manner presently to be described. This separated serum is to be accurately weighed, as well as the whole amount of blood before the serum was removed, and by subtraction of the weight of the separated serum, there will be left the weight of the clot and whatever it may contain, which must be noted. The next step is to place the partial separated serum over the water-bath for evaporation and desiccation ; this operation is intended to analyze this portion of serum into its water and solid serum—we shall call this *partial analysis*.

The nurse-lamp water bath, described in my paper on the urine, and published in the *Lancet* for April, 1853, will answer the purpose well, the wood being placed in one of the saucer-shaped tin pans there described.

Fibrine.—While the partial serum is evaporating, the operator may engage in separating the fibrine. This may be done in any way by which the blood globules can be washed away by means of water. At first, water may be poured into the vessel containing the clot, and be poured off again, carrying the globules along with it. All these washings must be saved. But finally I have found it best to envelope the clot in a rather coarse cotton or linen cloth, and tie it up tightly; then kneading it with the fingers, or washing it with water gradually separate or wash out the globules. When the globules cease to escape abundantly, I have found it to facilitate the process to untie the cloth occasionally and tear the condensing fibrine, thus presenting the interior and more bloody portion next to the cloth, when again, on tying up and washing, abundance of globules will escape. By a good deal of time and patience, the fibrine will be washed to whiteness. It is then to be cleanly removed from the cloth, and dried over the water-bath. It is finally to be completely desiccated by being placed under the exhausted receiver of an air pump, along with a separate vessel of sulphuric acid, and the pump occasionally worked until the fibrine ceases to lose weight. The fibrine thus procured must be immediately weighed and the weight noted.

This will be the entire weight of the FIBRINE belonging to the quantity of blood analyzed.

Partial portion of the Serum.—When this shall have been dried in the same manner as the fibrine, it is to be weighed, and the weight noted as a *part* of the serum; the loss of weight in drying should also be noted as a *part* of the water which the blood contained. The ratio or proportion of the solid dry serum to the water is also obtained and may be expressed as a fraction by placing the weight of the dry serum over the weight of the water as 10-100.

We finally proceed to evaporate the washings containing the globules and the remainder of the serum. This is evaporated to dryness and dessicated under the air-pump receiver in the same man-

ner as was the fibrine. Subtract the dry remainder from the weight of the whole clot previously noted, and the remainder will be the weight of the water of the clot. Add this last to the weight of the water of the partial analysis of the serum, and the sum will be the *weight of the whole water* in the whole quantity of the blood analyzed. Then say—

As the water of the decanted serum or partial analysis, is to the dried serum from the same—so is the whole amount of water as above, to the *whole amount of serum* in the quantity of blood analyzed.*

Thus we shall have obtained—

- 1st. The amount of Fibrine ;
- 2d. The amount of water ;
3. The amount of dried serum ;

And it is now only necessary to add the weight of these items together, and subtract that amount from the weight of the whole blood analyzed, and the remainder will be the amount of the fourth and last quantity required.

The Globules.—It is well to collect the blood in a thin, light vessel which has been weighed, for this enables one to weigh the whole, and by subtracting the weight of the vessel, obtain that of the blood.

If the air-pump could be dispensed with by ascertaining the proportion of the retained water, at the temperature of the water-bath, and making a suitable allowance for it—a thing which I think practicable—this analysis would be in the power of a much greater number of persons.

ANDRAL'S HEALTHY BLOOD.

Fibrine,	-	-	-	-	-	-	-	3.00
Blood globules,	-	-	-	-	-	-	-	117.00
Solids of serum,	-	-	-	-	-	-	-	80.00
Water,	-	-	-	-	-	-	-	800.00
Amount	-	-	-	-	-	-	-	1000.00

* Or instead of applying this proportional formula, the whole quantity of water, when obtained, may be multiplied by the amount of the dry serum in the partial analysis ; or multiply by the upper number of the above fraction and divide by the lower number of the same, then will the resulting number be the weight of the whole serum.

ANDRAL'S BLOOD IN DISEASE.*

Blood.	Health.	Variation in disease.	Rheumatism.	Fever.	Ammonia.	Cerebral congestion.	Bright's Disease.
Fibrine	3	10 $\frac{1}{2}$ to 1	10	.9	3.5	2.7	3.2
Globules	117	185 " 21	101	93.1	38.5	152.3	82.0
Solid Serum.....	80	114 " 57	90	86.0	89.0	125	74.8
Water.....	800	915 " 725	799	820.0	859.0	740	850.0
	1000		1000	1000	1000	1000	1000

* See Bence Jones' *Animal Chemistry*.

PART SECOND.

AMERICAN INTELLIGENCE.

ART. I.—PRIZE ESSAY—*On the zymotic theory of essential Fevers and other disordered conditions of the Blood.* By SAMUEL G. ARMOR, M. D., of Cleveland, Ohio.

"I profess a liberal medicine: I am neither of the old sect nor new, but follow wherever they cultivate truth."—KLENIUS.

There are few inquiries in pathological science of more interest than those which relate to changed conditions of the blood; for whether we regard it as endowed with a distinct vitality, and obedient to the laws of cellular growth, development and decay; or as ministering to the nutritive and textural wants of the system in the elaboration of fibrine from elements furnished by primary assimilation, or as connected with important chemical changes essential to a healthy action of the system; whether we regard the blood as contributing to one or more of these purposes in the animal economy, it becomes at once evident that destruction of its vitality, or change in any of its constituent elements, must be followed by serious con-

stitutional disturbances. Hence the interest with which its diseases should be studied, and the importance of understanding, in a curative point of view, the primary or secondary impression of disease upon this fluid.

It must be confessed, however, that the question of *priority* or *sequence*, although of much interest to him who thinks or reasons about the origin, nature, and phenomena of disease, is often one of difficult solution. But to arrive at greater certainty on this point, if possible, so far as relates to the Essential Fevers, is the object of this essay ; and if I shall succeed, in any degree, in pointing out the distinction between *symptoms* of diseased action and *diseased action itself*, I will have, to some extent, at least, accomplished my object.

In M. Andral's classification of lesions, in which he makes *all* disease to exist, he embraces some in which no notable change of either *organization* or *composition* can be detected. Yet it is worthy of inquiry as to whether this eminent pathologist has not included in his lesions some which are but *symptoms*, not properly diseases—*actions* and not *states*.

It is not my purpose, however, at present, to enter this field of inquiry. I desire to call attention to another question in which no such controversy can arise.

In the essential or idiopathic forms of fever, it is evident that change has been induced in the blood by the admixture of *foreign matters*. The proof of this consists in the fact : 1st, That diseases analagous to those fevers have been induced by injecting putrid matter into the veins of animals ; 2d, These fevers are readily produced by the introduction of animal poisons into the blood, as in the case of small-pox, measles, &c. ; 3d, These poisons are known to operate through the medium of the air, by thus gaining access to the blood through the lungs ; 4th, The non-contagious fevers, such as intermittents and remittents, are universally admitted to depend upon a poisoned or changed condition of the atmosphere ; 5th, Actual observation establishes the fact that the blood is altered in all essential or idiopathic fevers.

The best point of departure, therefore, is the general fact,—for it should be regarded as such—that all essential fevers depend principally on a poisoning of the blood, and the proof as to primary impression, will be given in illustration of the facts already cited.

It must not be inferred, however, that I am laboring to establish the *identity* of fevers. No such inference can be legitimately drawn from any fact or reason which I shall present. True, so far as the general fact is concerned, that all foreign matters, when introduced into the blood, change either its physical, chemical, or vital properties, all essential fevers may be regarded as a *unit*; yet observation has abundantly established the fact that different poisons act differently on the human constitution, and upon the peculiar and specific character of each depends not only the destructive effect on the blood, but the local lesions that will ensue. Urea and its compounds, if retained in the blood, affect the brain and nervous system, and are apt to give rise to a low grade of inflammation in serous and sero-fibrous tissues, while mucous structures will suffer but little. But the small-pox virus spends its force upon mucous and cutaneous structures, and leaves, unharmed, the serous and fibrous structures.

There can be no explanation given of this other than the general fact that the tissue or viscus affected seems to be that which has an affinity for the poison which has to be eliminated from the blood. In this process of elimination, inflammation and its sequels are excited, and local disease becomes manifest. Hence all essential fevers should be regarded as distinct in species *according to the circumstance of the primary sedative impression*. This is the only true and rational classification of fevers.

We feel authorized in asserting, then, as a starting point in our reasonings,—what observation abundantly establishes,—that each specific miasm has its own peculiar and distinct law of development. But in the absence of reliable information as to the *essential nature* of these miasms, it would be idle to speculate. Our knowledge on this point must, at least for the present, rest on observation.

But it will be at once perceived that our knowledge of the action of remedial agents is not more certain. Indeed, the perfect analogue of one is found in the other, and the reasoning applied to one applies with equal force to the other. Thus, that mercury will excite inflammation of the salivary glands; arsenic the mucous structures; belladonna the skin; ergot the uterus, &c.—has long been a matter of observation. But why they should do so, is just as obscure as why the typhoid poison should select for its destructive action the

glands of Peyer, or the small-pox should spend its influence upon the dermoid structures. The articles of *materia medica* furnish a just illustration of the action of foreign substances in the production of disease. Mercury, arsenic, or Croton oil, if uncontrolled by the judicious skill of the physician, is capable of giving rise to diseased action with as much certainty, and as varied in its manifestations, as either of the animal poisons to which I have alluded; and analogy would lead us to suppose that if we could *control* one as we can the other, miasmatic poisons might be used as therapeutic agents. That all agents that affect the vitality or composition of the blood, bear certain general pathological relations cannot be doubted—but that by no means proves the doctrine of identity. As well might we assert the identity of small-pox and typhus fever, from the fact that the fibrin of the blood is deficient in both.

An important point, however, to be established before conclusions are drawn, is the fact that the blood does undergo change in disease, and from medication, diet, &c.; for if this be denied, our conclusions will be without a predicate, and therefore unsound. But the chemists have, happily settled this point, by furnishing us accurate analysis of the blood, both in health and disease. In the condition of health the venous blood of a man, as represented by the number 1000, is composed of

Serum	869.1547
Globules—fibrin included ..	120.8453
	<hr/>
	1000

This varies, however, according to age, sex, temperament, kinds of food, evacuations, &c. The rapidity with which some of the solid constituents of the blood are diminished by blood-letting, for example, is very remarkable. Thus, according to the researches of of Dumas, the blood of a robust young man of 23 years of age, gave:

At the first venesection—

Water	780.210
Globules	139.139
Albumen	80.661
Salts	
Fatty and extractive matters	
	<hr/>
	1000

At the third venesection :

Water.....	853.46
Globules	76.19
Albumen.....	} 70.35
Salts	
Fatty and exrtactive matters..	
	<hr/> 1000

The more solid constituents of the blood, it will be seen, are rapidly supplied by a compensating quantity of non-sanguinous fluid ; and hence the value of blood-letting when it is desirable to promote absorption.

Diet and drinks also very readily affect the constitution of the blood. According to M. Dennis, in the blood of a young man 21 years of age, were found :

Water.....	770
Globules	154
Albumen, &c.....	76
	<hr/> 1000

And after 40 days' use of watery drinks :

Water.....	804
Globules.....	111.9
Albumen.....	84.1
	<hr/> 1000

It will thus be seen that the blood is very readily changed in its constitution by blood-letting, diet and exercise. It sustains direct relations also, to the air we breathe, to the water we drink, to the food we eat, and to the excretions of the body by which it is purified ; and that a fluid which is presented to us in such a compound and complicated form, and sustaining so many relations to the various modifying influences which surround it, should not become a frequent seat of *disease*, would indeed be an anomaly in nature.

Among the various hypotheses to account for fever, a zymosis, or fermentation of the blood, has prevailed under one form or other from remote antiquity. But it has been so inseparably connected with the old humoral pathology, that it has received but little consideration. Recently this hypothesis, (for I shall regard it as such at present,) has been rendered, to say the least of it, very plausible by the researches of the distinguished Liebig.

In his "Animal Chemistry" he calls attention to the fact that no other component part of the organism can be compared to the blood in respect of the feeble resistance it offers to exterior influences, and the reason assigned is, that "it is not an organ which is formed, but an organ in a state of formation." The following quotation embodies in a few words, the main leading thought of the author on this subject :

"The chemical force and the vital principle hold each other in such perfect equilibrium, that every disturbance, however trifling, or from whatever cause it may proceed, affects a change of the blood."

This, then, is an important starting point in our reasoning process ; for if it be really possessed of a low vitality, we may logically arrive at the conclusion, by *a priori* argument, if we knew nothing of the facts in confirmation of it, that all fevers, produced by endemic, epidemic, or infectious causes, have their origin in a primary diseased condition of the blood.

A zymotic change of the blood is due, according to Liebig, to a decomposing organic molecule in the interior of the human body. This molecule, by a law of analysis, induction or contact, has the power of imparting its own motion to another molecule with which it may be in contact ; hence chemists have defined it to be "decomposition by contact," or the "action of presence." We have illustrations of this law in the power which small quantities of substances, in a state of change, possess of causing unlimited quantities to pass into the same state ; and it is an interesting fact, worthy of note in this connection, that all substances which readily suffer this transformation are, without exception, bodies which contain *nitrogen*. A large portion of the blood being composed of this element, we might readily conclude that it was the vital principle alone that keeps it from spontaneously passing into this condition of transformation. If the catalytic force be greater than the resistance offered by the vital principle, the blood must pass into a condition of decomposition.

It may be asked however, with reference to this law of zymosis or induction—Is there any evidence to show that the introduction of putrid matter in the animal system, does give rise to effects which are at all comparable to those of fever ? If not, the law which has been

announced is but speculation, and at best an hypothesis. But let us see. "It is a fact," says Liebig, "that subjects in anatomical theatres frequently pass into a state of decomposition which is communicated to the blood of the living body." And the fact observed by Magendie, that putrifying blood, brain, eggs, &c., laid on recent wounds, cause vomiting, lassitude and death, after a longer or shorter interval, has never as yet been contradicted. Numerous experiments have demonstrated that putrid matter, injected into the blood of healthy animals, will give rise to a set of symptoms which are very analogous to Typhus. "If a small portion of putrid matter," says Armstrong, "be accidentally introduced into the blood during dissection, or if the experiment be made upon lower animals, it produces fever, having exactly the character of Typhus, under its continued form, and *no individual could confidently pronounce that it differed from it.*" Bernard has also shown that by injecting yeast or sugar into the circulation, many of the ordinary kinds of fermentation are excited, giving rise to a disease very analogous to Typhoid fever, accompanied by prostration of the strength, bloody fluxes, ecchymosis, and a black and uncoagulated condition of the blood. "Lastly, it is," says Leibig, quoting from Henle, "a universal observation, that the origin of epidemic diseases is often to be traced to the putrefaction of large quantities of animal and vegetable matters; that miasmatic diseases are endemic in places where the decomposition of organic matter is constantly taking place, as in marshy and moist localities; that they are developed epidemically, under the same circumstances, after inundations; also in places where many people are crowded together with insufficient ventilation, as in ships, prisons, and besieged places."

It is also worthy of note that these factitious fevers, produced by the introduction of deleterious substances directly into the blood, are analogous, both in their symptoms and pathological lesions, to those produced by the sting or bite of certain animals; they present also the same general class of symptoms that are present in small-pox, malignant scarlatina, and other eruptive diseases.

In Mr. Walker's work on Grave-yards, he also presents an array of facts which prove, beyond all controversy, that putrid animal exhalations have given rise to diseases that have raged like a pestilence

or epidemic. He cites an instructive instance which occurred in 1733 in the parish of St. Saturnine, in Burgundy. A sexton, while letting down a corpse into the vault, accidentally broke a coffin which contained the body of a fat man that had been buried twenty-three days. A discharge of sanies followed, which greatly annoyed the assistants; and "of one hundred and twenty young persons who assembled to receive their first communion, all but six fell dangerously ill, together with the Curè, the grave-digger, and sixty other persons." The disease is described as a putrid, verminous fever, accompanied with hemorrhage, eruption and inflammation.

Facts in support of these views might be accumulated at great length. Dr. Francis Home communicated measles by means of a drop of blood from a patient affected with the disease. And the experiments of M. Gendrin, as given in Williams' Principles of Medicine, is a striking one in point:—A man who had been skinning a diseased animal, was seized with a putrid fever, attended with an eruption of sloughing pustules. Some blood taken from this man was injected with the cellular texture of the groin of a cat; the animal was soon after affected with vomiting of bile, dyspnœa, frequent, small, and irregular pulse, dry, brown tongue, slight convulsions, and died seven hours after the injection." The same pathologist induced in animals various and severe symptoms, followed by death, by injecting into their veins the blood of persons laboring under Small Pox. M. Dupuy and Lauret also communicated the malignant pustular disease known as "Charbon," by injecting into the veins of the healthy horse a minute quantity of blood of the diseased animal. Andral relates an extraordinary case in which a malignant fever, followed with pustular eruption and death, was occasioned by the mere contact of the lips with the diseased blood of an animal.

May we not, then, infer from these facts, that the blood is the hot bed in which many malignant diseases are propagated, whether by ova, parasites, cell germs, or zymotic action?

But our proof does not rest here. Clinical observation has long since established the alteration of the blood in diseases which are termed *putrid*: the blood appears to be in a partial state of *dissolution*: its vitality is destroyed, and its fibrin either not elaborated, or dis-

solved in the process of putrefaction. As a result of this decomposition, an increased quantity of hydro-sulphate of ammonia has been found in the blood of patients suffering from Typhus and other malignant diseases; and hence the *alkaline* reaction of the urine that is so often observed to be present in these fevers.

These observations have been made the basis for the support of a great group of maladies which go by the name of Zymotic diseases, and include, according to the statistical nosology of Mr. Farr, small pox, chicken pox, all eruptive diseases, influenza, scurvy, purpura, ague, remittent fever, yellow fever, typhus, puerperal, plague, hospital gangrene, &c. And in proof of their Zymotic origin, the fact has been offered—1st, That the vitality of the blood is low, and that it therefore readily suffers transformations; 2nd, That we can produce in animals and man, factitious diseases by inoculations or injections of putrid or contagious matter, having all the characteristics of the Essential fevers; and 3d, That clinical observation establishes the fact that the blood is changed. And that the febrile phenomena present in these fevers indicate a condition of the system independent of inflammatory action, I infer from the fact—1st, That in the absence of complication during the progress of the disease, there is no evidence of inflammation revealed by post mortem inspection; and 2nd, That the symptoms coëxist with a diminution of the fibrin of the blood, and diminished tolerance of the loss of blood. In some of the most malignant forms of fever—these in which the fibrin of the blood is at its minimum—there is often not much heat of the body and but little increase of pulse. The patient often dies in the cold stage of such fevers, without in fact having any fever! Evidently, therefore, the term *fever* may be used in two very different senses—in one signifying a collection of symptoms depending on local inflammation—and in the other a *condition* of the system entirely independent of such inflammation. In one the term indicates the name of a *disease*, and in the other the name of a *symptom*. Hence the distinction between essential and symptomatic fevers, and hence the inference, also, that essential fevers have their origin in certain qualitative changes of the blood, caused by the introduction of foreign matters.

Further proof that the general class of diseases which have been termed zymotic have their origin in the blood, is drawn from the

symptoms usually present. These will be found accurately detailed by all the standard writers on General Pathology under the head of "*Necræmia, or death beginning with the blood,*" such as petechiæ and vibices on the external surface, the occurrence of hemorrhage in internal parts, the general fluidity of the blood, its frequently dark and otherwise altered aspect, its proneness to pass into decomposition, the general prostration of all the vital powers, the dark tongue, sordes on the teeth, suspended secretion, and the general arrest of molecular nutrition. Indeed, the very *universality* of diseased action points to a cause more general than can be found in any individual function.

I have thus far spoken of the admixture of foreign elements in the blood from *without*. There are causes, however, which operate on it *intrinsically* as well as *extrinsically*. Thus defective excretion is followed by a direct *backward* action on the blood, resulting in changes of its chemical or vital properties. The excretory organs are the natural emunctories through which effete matters generated within the organism, are expelled from the blood; the product of the various excretions may be regarded, therefore, as the correct expression of the numerous changes that are taking place both in the healthy and diseased animal fabric. In febrile diseases these organs are generally suspended in the exercise of their healthy functions—an increase of perspiration, or in the flow of urine, or a spontaneous diarrhœa, being generally accompanied with a subsidence of the febrile phenomena.

Relatively considered, the *Kidneys* may be regarded as the most important emunctories through which morbid matter is expelled from the blood. The experiments of Orfila on this subject are highly satisfactory. He found that the pernicious effects of small and repeated doses of arsenic could be readily averted in animals by giving them, at the same time, a diuretic medicine; and the converse fact has been frequently observed, namely, that persons who suffer from disease of the kidney, by which its function is impaired, very readily contract infectious diseases, and are apt to suffer from their effects. It has also been observed that opium, arsenic, mercury, &c., operate with dangerous energy on such patients.

The experiments of Dr. Golding Bird are very conclusive on this subject. His observations have been extensive and accurate. Two,

of many cases, are here given. In the first, a case of ague, the patient was kept in the hospital from the 23d of May to the 16th of June following.

The following is his table of analysis :

May 23. Passed 12 oz. urine, and 352 grs. solid constituent.

"	26.	"	40	"	"	328	"
"	28,	"	35	"	"	725	"
"	30.	"	48	"	"	1054	"
"	31.	"	45	"	"	743	"

June 2. Passed 35 oz. urine and 514 grs. solid constituent.

"	4.	"	30	"		879	"
"	6.	"	27	"		1036	"
"	7.	"	35	"		436	"
"	9.	"	40	"		1172	"
"	11.	"	45	"		742	"
"	13.	"	40	"		916	"
"	14.	"	43	"		984	"
"	37.	"	37	"		1045	"

There was a decided improvement, says Dr. Bird, on the 30th, severe paroxysms on the 3d, better again on the 6th, and no return of the ague after the 9th.

In the second case of ague—girl aged 19—patient was kept in Hospital from 23d of June to May 7th. On the 23d of May there was a severe paroxysm, and the amount of solids excreted was 280 grs. On the 7th she had a return of paroxysm, and there were 280 grs. solid constituents in the urine. On the 28th she was better, and the solid constituents in the urine amounted 538 grs. On the 30th they amounted to 625 grs., and from this time the patient rapidly got well.

In this, also, it will be observed that *pari passu* with the patient's improvement there was an increase of the solid constituents of the urine. In Typhus, and other adynamic forms of fever, the same facts have been observed,

Are we to infer, however, from these observations, that defective excretion is the primary *cause* of the fever? By no means. That

would be an imperfect view of the pathology of fevers. I can conceive of no instance in which a lesion of secretion can be properly classed among the *primary* elements of disease. Some change must precede it, either of structure, of innervation, or of the blood from which the secretion is formed. The examples cited simply show the curative effects of the removal of foreign matters from the blood by depurating organs, and at the same time go far towards establishing the ancient doctrine of *critical discharges*.

They also serve to point out the two causes of disease which constantly present themselves for our consideration—causes *extrinsic* and *intrinsic*. Of these one or both may be in active operation. It is an erroneous dogma to suppose that but one poison can act on the system at a time. As rational would it be to suppose that but one medicinal agent can produce its effects upon the constitution at a time.

I have already alluded to the fact, demonstrated by observation, that different poisons spend their influence upon different tissues of the body. It is an unwarrantable speculation to transfer this law of *specific contamination* to the structure of the blood, and thus explain the action of different foreign bodies upon that fluid? Some poisons may be regarded as comparatively innoxious; they emerge from the body unaltered with one or more of the ordinary secretions; others destroy some element of the blood, (or its corpuscular element in the lymphatic glandular system,) so that it is never again subject to the same poison, as in the case of some of the eruptive and contagious diseases; while others, by entering into chemical union with one or more elements of the blood essential to life, destroy its vitality, and general necræmia and molecular death soon follow.

This will be recognized as an unproven speculation of the old fashioned humoral pathology. And, in the absence of positive proof, I do not, of course, offer it as one of the “fixed facts” of medical science. Yet observation, reason, and analogy, throw around it a *plausibility* that entitles it to a still further investigation.

In submitting these views I would not be understood as attempting to sustain an exclusive humoral pathology; nor would I under-rate the importance of pathological changes in the solids. With Bichat, I regard “every exclusive theory, whether of humoralism or

solidism, as a pathological absurdity." The relation between them is too direct and intimate ever to be separated ; neither can the one or the other ever be regarded as an "exploded system." Humorism will never be exploded as long as the blood is the source of life to the tissues ; nor will solidism be disregarded as long as the tissues continue to undergo changes from altered conditions of the blood. My object is rather to fix the mind upon what I regard as an important truth, viz : that in all essential or idiopathic fevers, changes of the solids depend upon previous alterations, quantitative and qualitative, of the blood.

This altered condition of the blood is soon made manifest by general febrile phenomena. The nervous centres, depending directly for their powers on the state of integrity of this fluid, become perverted and weakened in action ; the functions of the animal and organic life are depressed ; passive congestion, induced by depression of nervous power, follows ; and hence the torpor and arrest of glandular action, and the sluggish and languid state of all the functions so characteristic of these fevers.

The importance of all these conditions I would by no means underrate. They present to us, indeed, an exceedingly interesting field of inquiry. From an impression first made upon the nutritive and assimilative functions, we are at once introduced to multiplied elements of disease. There is not a function, not a nerve, not a gland, nor a capillary vessel of the body but must feel the depressing effects of a contaminated condition of the blood. And this sluggish and languid state of the excretory organs becomes the cause of a still more poisoned condition of the blood, until this source of life becomes itself dead, and spreads death instead of life through the body.

The admittance of the zymotic theory into the field of pathology, would doubtless lead to greatly increased knowledge of the real nature of diseased states. In a large class of fevers it points out the only two modes of cure : 1. To counteract the injurious operation of the poisons ; 2d. To expel them from the system. The first of these indications is carried out in low typhus and adynamic forms of fever by the administration of saline medicines, such as the chloride of sodium, the chlorate of potash, hydrochloric acid, &c. Arsenic,

quinine, and other antiseptic remedies are also valuable agents in arresting the zymotic condition of the blood.

The other indication is the one most usually pursued, viz : to expel the offending matter from the system. This may be said to be Nature's mode of cure ; and in the absence of reliable knowledge as to the nature of the poison and its antidote, the physician can only aid Nature in her work of elimination. This he attempts by the administration of tonics, stimulants and depurents. The powers of life must be supported while nature effects the cure. But even in her own work of depuration, Nature may be greatly aided. The kidneys, skin, and alimentary canal, are the principal channels through which foreign matters are expelled from the blood ; and hence the utility of diuretics, aperients, and the so-called *Water-Cure*. The latter, by a combination of diuresis, and diaphoresis, may be rendered a most powerful therapeutic agent in cutting short a fever in its premonitory stages or at its final accession. The absurdity of hydro-pathy, as a one-ideal system of cure, is its blind and indiscriminate application to every variety of disease ; and it is to be regretted that a remedy of such valuable therapeutic power is often brought into undeserved disrepute by falling into the hands of ignorant intermeddlers with nature.

If the views of the pathology of essential fevers which I have presented be correct, it is almost impossible to avoid giving assent to the doctrine that regards the fever as an effort of the "vis medica-trix," instituted for the purpose of expelling the poison from the system, and while it repudiates the doctrine of the boasting fever-curer, as well as the doctrine of non-interference, which has aptly been styled a "meditation on death," it rests upon the great physiological truth that Nature is ever active in her recuperative powers, and is, after all, the best and wisest of physicians.

This pathology also offers the most rational explanation of the modification of the diseased action growing out of prevailing epidemic influences. It fixes the mind upon two controlling elements of disease ; 1st, Upon the depressing effects of a zymotic poison, by inducing changes in the blood ; 2d, The local inflammatory or functional complication that may be engrafted upon and influenced by this altered condition of the blood. It thus draws the line of de-

marcation between general and special pathology, by keeping in view *constitutional conditions as modifying local action*, and by this means enables us to comprehend the most important question, practically considered, within the wide range of medical inquiry—the distinction between *Sthenic and Asthenic* diseases, between depressed and exalted action. Its tendency is to give us broader views and clearer conceptions of the varied elements of disease as they act and react, and insensibly shade into each other.

It modifies, moreover, and renders more rational, the *treatment* of disease. Does an inflammatory affection overtake one whose blood is contaminated by an epidemic influence, or by putrid emanations, vegetable or animal; or whose blood is only imperfectly or badly repaired by insufficient or unwholesome diet?—then of course the inflammation is *asthensic* in character, and other antiplogistic remedies, must be resorted to, if at all, with great caution. If the blood has been “touched corruptibly” by an epidemic influence or typhoid poison, we must husband rather than depress the flagging powers of life. To adopt, in such cases, (as we fear is too often done,) the ordinary treatment for an acute pneumonia or dysentery, as the case may be, regardless of the evidence of *blood disease*, such as loss of tone and strength of the vascular system, sluggish functions, dull mental faculties, feeble and compressible pulse, and brown or dark tongue, would be to hasten the dissolution of the patient, and bring both doctor and medicine into disrepute. The great secret of success in the treatment of disease is to be found in a broad, comprehensive and rational pathology,—a pathology that weighs every element of disease, whether of fluids or of solids, that is capable of exciting, depressing, or perverting vital actions.

I have thus ventured to present a few facts with the hope of calling attention to a subject which may not as yet, have occupied the minds of some of the members of the profession; and although I may have presented but a dim vision of the true light, yet *I trust I have got hold of my pitcher by the right handle.*

ART. II.—*Extracts from the Records of the Boston Society for Medical Improvement.* By WM. W. MORLAND, M. D., Sec'y.

SEPTEMBER 27, and OCTOBER 11.—Cases of Arrest of Development, Blemishes, etc., in Infants, attributed to Strong Mental Action in the Mother, while

Pregnant ; Disagreeable Sights ; Sudden Shock, &c. ; Discussion upon the Question whether such Action of the Mind be ever a Cause of such observed Results.

CASE I. *Arrest of Development attributed by the Mother to a Fright during Pregnancy.*—Dr. Storer reported the case. Several months since, a female patient of Dr. S.'s expressed some anxiety respecting her sister, who expected shortly to be confined, and who could not be persuaded that she would not have a deformed child. Three or four weeks after her marriage, she was much affected at seeing a hen injured by a stone thrown by a boy—the stone broke one of its legs and removed the lower portion. She was exceedingly troubled at the time, and as her pregnancy advanced, continually dwelt upon the subject, insisting that her child when born would be found to be deformed. Her friends at last began to feel some concern as to the result, and hence the reason of Dr. S. being consulted. A few weeks afterwards, Dr. S. heard from his patient that her sister had been confined, and that one foot was wanting ; that, immediately after her delivery, the mother asked to see her child ; one foot was shown her as being natural, and an effort made to divert her attention from the child ; but she could not be pacified until she saw the other limb, continually insisting that she knew it was deformed. Dr. S., being very anxious to see the child, requested that he might know when it should be brought to this city.

Since the last meeting of the Society, he has had an opportunity to examine it. The child, perfectly well formed in other respects, exhibited upon one of the lower extremities, simply a heel and the rudiments of the five toes, at the extremities of which were placed microscopic nails. Dr. S. observed that he was led to refer to this case from the peculiarities of the patient's conduct previous to her confinement. It was not an uncommon circumstance for a mother, *after* the birth of a deformed child, to account at once for the defect by something which had occurred during her pregnancy ; but he believed it to be very rare for a patient to dwell upon the subject for months *previous* to her confinement, and immediately upon her delivery insist upon seeing her offspring to prove her conviction.

Dr. Bigelow, Sen., remarked that very many of these cases are referable to afterthought of the mother. Women are often anxious in

regard to the possible deformities of their offspring, and there are few pregnant women who escape seeing some peculiar and even disagreeable sight or objects during their gestation; any marks observed would, therefore, be coincidental *by the rule of chances*: in ninety-nine out of a hundred pregnant females, no untoward results would be observed. Dr. B. does not believe it possible that an arrest of development can arise from the action of the imagination of the mother, or from the effect of sudden disagreeable impression on her mind. It is not unfrequent that mothers inquire *whether their child be perfect*; at all events, the *frequency* of deformities after any shocking sight is the *test* of the truth of the existence of such *cause* for deformity. Dr. B. believes that if one hundred pregnant women were to be exposed to the action of such supposed causes, or should experience any of the strong and peculiar “longings” of pregnancy, no blemish would be thereby produced in the children.

Dr. Cabot referred to the fact that, during the siege of Antwerp, there were very many *stillborn*, and a large proportion of *deformed* children.

Dr. Durkee asked, if this theory of the influence of mental impressions on the pregnant female does not find support in certain analogies observed among animals? He referred to the Old Testament narration (*Genesis*, chap. xxx,) and added that remarkably similar facts may be observed at the present day in the breeding of animals.

Dr. Jackson said that very likely there might not be one in a thousand, exposed as suggested by Dr. Bigelow, in whom unfortunate results would follow; *all* are not *equally susceptible* of such influences—some not *at all so*; the *special* cases, however, are not to be explained or ridiculed away; there is enough of plausibility, if nothing more, in the view he sustains of the matter, to render women cautious of needless exposure to unpleasant sights in the *early months* of pregnancy.

Dr. J. added that, from the cases he had seen, or heard of upon good authority, he was inclined to believe that a malformation in the fœtus may be induced by an external cause operating upon the mind of the mother during her pregnancy, and, further, that the malformation may bear to the cause some relation or resemblance. This

last has always been a popular notion ; but is regarded, on the other hand, by the scientific, as perfectly absurd ; the presumed cause operating upon the mother at a period of pregnancy when the fœtus must be too far developed, it is said, for any such malformations as have been referred to, to be produced. There is, moreover, no nervous communication between the mother and the fœtus. The number of negative facts is numerous beyond account ; of cases, that is, where a sufficient cause, according to the above hypothesis, existed for malformation, and yet none occurred. No possible explanation can be offered for the production of a malformation by the presumed cause ; nor will it be possible, until we know much more than we do of the obscure subject of the physiology of the fœtus. The resemblance between the malformation and the cause, it is said, is a mere coincidence ; but, upon the common doctrine of chances, the coincidence is too remarkable to be explained away so readily, and, if one case is suggestive, a second adds very great weight, and a third is almost or quite conclusive. M. St. Hilaire (*Anomalies de l' Organisation*) believes that some monstrosities, the anencephalous for instance, owe their being, in some cases, to the operation of a strong moral cause upon the mother ; but he does not believe in any resemblance in the particular malformation to the exciting cause, and for the reason above mentioned. It would have been well had he stated at what period of pregnancy the mothers, in his cases, were subjected to the causes that led to their monstrous births. Another remark often made, is, that pregnant women do not predict the malformation, but, when it is discovered, look back for some cause to which they can refer to it. This might be questioned ; but, allowing that it is so, and even that they had ceased to think of the assigned cause, it does not follow that it had not operated efficiently at the time ; the impression was made upon the mind of the mother, and through it upon the fœtus—the one was soon effaced, the other remained. Much would depend upon the character of the exciting cause, and much also, as he had before remarked, upon the *susceptibility* of the individual to the receiving and the retaining of impressions. Dr. J. then reported the following cases :—

1. Several years ago, he saw a young lady, about thirteen years of age, of rather a small and delicate figure, and whose middle finger

upon one hand was fully equal in size to that of a man's; the corresponding metacarpal bone being also decidedly enlarged, and even the forearm somewhat so. The finger was itself well formed, as in some other cases of similar malformation that have been observed here. The hand also was otherwise well formed.

The mother of this young lady, during her pregnancy, was obliged for a long time to dress a felon or whitlow for an old uncle, the finger affected corresponding to the one that is malformed in the case of her daughter; and the operation was always disagreeable to her, as she was a woman of a particular nervous temperament.

2. In November, 1846, Dr. J. saw an infant with an extensive blood-mark, as it may be called, upon one of the upper extremities. The mother, whom he has attended for several years, and knows to be a woman of very susceptible feelings, gave the following statement: When two and a half to three months pregnant, though not at the time aware of her situation, she had been out of town for the afternoon, when, on her return, as the cars entered the depot, she saw a man who had been recently killed. He was lying upon his face, with his head turned to one side, the sleeve of his coat torn entirely off, the whole upper extremity exposed and more or less bloody, and so twisted, as she supposed from dislocation at the shoulder, that the hand lay upon the upper part of the back. At this sight she nearly fainted, and probably would have entirely, if she had not had two of her children with her. For at least a month afterwards she was decidedly ill; and during the remainder of her pregnancy she could not banish the thought from her mind; she also felt that there would be great danger in regard to the child in utero, though she never expressed her anxiety upon this point to any one. The extent and degree of the discoloration of the skin were not fully recorded by Dr. J. at the time; but, having recently seen the mother, she informs him (for the child has since died) that it extended from the back of the hand and towards the thumb, where it was most marked, upwards along the extremity to the shoulder, and even somewhat upon the neck. It was not equally marked throughout, being in some parts more or less continuous, and in others simply spotted or dotted. Her other children she has always dressed in short sleeves; but this child's arms she covered, on ac-

count of the marked deformity ; and, as she says, if it had lived, it could never have worn a low-necked dress. The child itself, moreover, was so sensible of the mark that it would occasionally be seen endeavoring to wipe it off. The discolored arm in the child corresponded, as to the side affected, with the one that was injured in the man.

3. Dr. Z. B. Adams related to Dr. J., several years ago, the following case : He attended a woman in labor, and the child was found to have one of the forearms terminating in a conical stump just above the wrist. During her pregnancy she attended for several weeks upon her brother who had had his hand torn off by machinery, and the forearm afterwards amputated ; the injury being upon the same side as the malformation in the child.

4. Case reported by the late Dr. Doane, of this city. The mother of several blind children was holding one of them in her lap, when it put its finger into one of her ear-rings, drew it down forcibly, and tore it through the flesh. She was pregnant at the time ; and when her child was born, it had a fissure in the ear corresponding to the laceration in its mother's.

At the next meeting, Dr. Storer said he had met with reports of two cases since the last meeting, which tended to confirm the opinion at that time advanced, that any remarkable sensation sustained by the mother during her early pregnancy, might produce an effect more or less well marked upon the fœtus in utero—that this effect need not necessarily partake of the character of the exciting cause—but that, should the mother be so far influenced as to receive a decided shock upon her system, it might be followed by some abnormal condition of her child—arrest in development or some peculiar malformation. The following cases he had observed in the “*Proceedings of the Medical Association of the State of Alabama*,” for December, 1850.

“Dr. R. Lee Fearn related the following very remarkable particulars of a case, where the impressions received by a mother during pregnancy, affected her child in utero. A gentleman, whilst shooting, shot through the metacarpal bone of his index finger. The wound was a bad one, and piece after piece of the bone came away. A few months after the accident here mentioned, and in due season,

his wife bore him a child perfectly formed in all respects. When about four months advanced in her second pregnancy, an operation was deemed necessary to remove the last remaining portion of bone in her husband's finger. She witnessed the operation, and was much shocked and alarmed at the sight. When her child was born, it was found to be deficient in this very bone, though in all other particulars it was a well-formed child. The Doctor thought this was by no means the result of chance, but a very conclusive instance of cause and effect.

"Dr. Dossey remarked, that the relation of this case called to his mind a similar instance:—

"Dr. G—— was thrown from his horse and broke his leg, midway between the ankle and knee. His wife was about five months advanced in pregnancy. When the child of which she was pregnant was born, it had on the leg corresponding with the injured limb of the father, and at precisely the same spot, the appearance of a fracture of the limb, and there was also a decided shattering of the leg."

Dr. Strong thought that the notion so popularly entertained in reference to this matter is too general not to have *some foundation in truth*. It certainly deserves investigation. He added, that the idea of greater liability to these attributed effects, from the causes mentioned, in the *early* part of pregnancy, seemed to him very well founded; perhaps the influencing power, be it the imagination, or what it may, *ceases after a certain period of gestation*; has a *limitation*. Dr. S. also referred to the fact that a *mare* covered by a *quagga* always afterwards, when impregnated by a *stallion*, brought forth *striped colts*.

Dr. Cabot mentioned the statement of M. Donne, of Paris, who declares the above fact, as stated by Dr. Strong, to be constantly observed under the same conditions; he even goes farther, and asserts that one portion of the constitution of one man is propagated, *by another man, from the widow of the first to children by the second*.

Dr. Bigelow, Sen., asked to what cause we must attribute the imperfections and arrests of development observed in fruits, flowers and plants. Have *they* imagination? and does it act with this effect upon them?

Dr. B. declared his entire disbelief in any such effects from the attributed causes.

Dr. Hayward, Sen., asked whether this action or influence (if it be recognized as efficient) is *imaginative* or purely physical? Dr. H. mentioned a mother, who, while pregnant, suddenly saw one of her children, ill with pneumonia, covered with blood by some accident; the child she was carrying, when born, had a *large red stain* or spot upon its face. Here, imagination could hardly be the cause, for the woman had not thought of, or brooded over, the occurrence, nor had she any apprehension that her infant would be marked.

Dr. Homans spoke of an acephalous foetus, the mother of which during pregnancy had not even apprehended any marring of her child. Dr. H. does not remember, since that case, any other wherein the mothers had *anticipated* any monstrosity although such did occur. These facts he considered would militate with the imagination doctrine, or the idea of effect from strong mental impression or shock on the foetus in utero.

Dr. Strong remarked upon the difference between mental and physical laws in their action on the system. Some individuals have, and some have not, the imagination sufficiently sensitive and impressible for the production of such marked action as has been referred to. The *final question*, however, is whether such results are *ever* produced. If this be proved and conceded, it is sufficient to make the fact a fixed one. *One* instance thus established is enough, and as good as *ten thousand*. The numerical system is valueless upon this question.

Dr. Bigelow, Sen., would pronounce this principle of different impressibility, &c., to be the foundation of all the charlatanry of the day. The remarks of Drs. Jackson and Strong go to prove only the possibility of these occurrences under the above supposed theory, but do not establish their certainty. There is not sufficient basis, as he views the subject, for making a rule or law in regard to it.

Dr. Strong asked if any one had seen so strongly marked special cases as that of the slitted ear and the enlarged finger narrated by Dr. Jackson?

Dr. Hayward, Sen., mentioned two cases of slitted ear; the slit being in the portion in which ear-rings are inserted. One individual, when seen by Dr. H., was 16 or 17 years of age. The mother did not remember any accident or sight possibly causative of such a result.

Dr. Wm. T. Parker related the following case which occurred in his father's practice in Virginia, many years ago: A lady, three months advanced in pregnancy, saw a pig, driven furiously out of an inclosure by a negro boy, have *its bowels torn out* by the stake of a fence. The lady was greatly shocked, and fainted. Her child, when born, had the entire front of the abdomen *covered only by a thin film, and the intestines were visible through it*. There was also imperforate anus. The child died not long after birth.

Dr. Channing related the case of a lady in Edinburgh, of which he heard while there lately: Her surgeon had been performing the operation for hare-lip, and the lady's attention was drawn to some blood which chanced to remain upon one of his fingers; at her request, he described the operation to her. She was from four to five months gone with child; at birth, *the child was found with hare-lip*. The mother stated that she had been much impressed by the above occurrence and narration.

Dr. C. alluded to the fact that the umbilical cord sometimes performs amputation of foetal limbs.

Dr. Coale said that the agency of mind upon matter cannot be denied. Sometimes the cause and the effect of nervous impressions are greatly disproportionate the one to the other. The action of these impressions on the stomach and bowels is undoubted. Dr. C. mentioned a patient under his care who, during her pregnancy, saw a deformed man, and was greatly affected and troubled at the occurrence. Previous to her confinement, however, the vivid impression subsided, to be renewed during the throes of parturition. She became very apprehensive of possible deformity of the child about to be born, which, however, presented none.

Dr. Bigelow, Jr., thought the *negative*, as well as the *positive* evidence on this subject should all be weighed; otherwise, *fallacious results* are nearly sure. *Strong numerical evidence* and *many cases* seem to him necessary for a decision; isolated cases are insufficient.

At the meeting holden Nov. 8, Dr. Storer reported that he had, during the last week, delivered a woman of an infant with hare-lip; the mother, the day after confinement, told him that she had been very painfully impressed while visiting, during her own pregnancy, a friend who was dying from phthisis, and who, during her visit, had a severe and sudden attack of hæmoptysis, accompanied by dis-

tressing dyspnœa. The pregnant lady was greatly shocked, so much as to faint; and she subsequently thought frequently of the occurrence, fearing its effects upon the child she carried. This infant was born with a hare-lip of double fissure.

Dr. Gould mentioned, as a "set-off" case to the above, the following: On last Monday, he attended a woman in labour, who, at the birth of her child, was very anxious that its palate should be examined, she having, early in her pregnancy, seen a person with very disagreeable countenance from deformity of the palate. She had been very unpleasantly affected by the sight, but, notwithstanding her very strong apprehension, no effects are visible upon her child.

The discussion of the subject was not resumed.—*Americaa Journ. of Med. Sciences.*

From the Southern Medical and Surgical Journal.

ART. III.—*Another White African.*

WHITEVILLE, Harris Co., Ga., May 16, 1853.

Dr. Dugas: Dear Sir—I noticed in the Eclectic department of the April No. of your Journal the report of a case of "Change of Color in an adult negro." I propose, briefly, to present you with a case of the same kind, equally as remarkable and much nearer home.

Charlotte, is a woman 34 years old, and living within one mile of me, whose skin is as fair as that of any lady of Caucasian blood, and who was as black at the age of 11 as any African. She says her health has been uniformly good, with the exception of one "spell of bowel complaint," which occurred when she was about 10 years old; sometime after which a white spot appeared on her forehead, which gradually though slowly enlarged. In the mean time other spots appeared on different parts of the face, which also increased in size, until the whole face became perfectly white. The change in the color of the face was completed in about six years, and she says that after her face "turned white," her whole body changed in one week. I saw her frequently during the metamorphosis, and noted its progress, during which time her countenance was so hideous that she was a fright to all the juveniles of the neighborhood.

She is at present strictly a white woman, except her eyes and hair, which are those of the negro—the latter, however, being whitish all around the margin. The skin freckles, and is easily blistered by the sun. She is a good servant; has ordinary intelligence; has had ten healthy children, all of whom are as black as their father, who is a full-blooded African.

The above are the facts of this “strange freak of nature.” Was the change a pathological or a physiological one? I am inclined to the latter opinion, because the subject was in good health, and the skin seemed to be so, during the change. But what strange whim possessed the absorbents to remove the pigmentum nigrum?

These are questions I shall leave to be answered by those who have more taste and talent for speculation than your humble servant.

E. C. HOOD, M. D.

ART. IV.—*Quinine in Cholera Infantum*. By G. W. BOOTH, M. D.,
of Carrollsville, Miss.

As the season is near at hand when that scourge of infancy, *Cholera Infantum*, usually makes its appearance, I will again invite the attention of the profession to the views I entertain of its etiology and treatment as published in some of the medical journals in 1851. In the communication referred to, I stated it as my opinion that it was of malarial origin. There are many reasons that I could give to sustain the correctness of this opinion, but I deem it unnecessary at this time.

My views respecting the origin of the disease influenced me to use the great and approved antiperiodic, Quinine, in its treatment. The success I met with in combating the disease with this article still farther confirmed me in my convictions as to its predisposing cause. I earnestly solicit the profession to give Quinine a fair trial in *Cholera Infantum*: I feel confident that no one will regret the experiment. I use other articles to meet particular indications, such as acetate of lead, and calomel, in small doses, for controlling the discharge from the bowels, acting on the liver, &c.

ART. VI.—*Cold Water in Dysentery.* By F. BLADES, M. D.

If it be the accumulated experience of individuals which gives us our *rules* in the practice of medicine, every one ought to contribute his mite, if it be of any value. I am, therefore, prompted to send you a slice of my experience.

Last year I had many cases of dysentery to treat. Some of these “wore the livery” of the ordinary non-malignant variety, and were amenable to the usual remedial means; while others—the majority—were of the epidemic malignant variety, and with surpassing stubbornness “went their ways,” heedless of cure, i. e., by the mostly practised methods.

Now, we, who have not a reputation to live on after defeat, cannot well afford—if I may use a sinister expression—to lose many patients consecutively, else we fall into disrepute and straight-away lose our practice.

This motive, which was secondary to the heartfelt interest I had in the recovery of my patients, as also this latter motive, caused me to depart from the calomel and opium, etc., etc., *land-marks*, in treating the more malignant variety of dysentery. I have now in my mind a case which, conjointly with Dr. Fowler, my partner, I was called upon to treat. The malady “waxed exceeding sore” from its outset. The griping was positively excruciating; the straining extremely ardent and incessant; the stools exceedingly large, grayish and bloody, containing membranous-like shreds; the pulse was quite frequent and forcible. This is a rudely sketched outline of the condition of the case as reported to me to have existed prior to my attendance. The doctor who was first called had treated the case with calomel and opium, q. s., castor oil and laudanum, as a laxative, once in twenty-four hours, with other adjuvantia now passed from memory, for three or four days, at which time I was called to see this case with him. The above mentioned symptoms were said to be unabated. The pulse was now feeble and about 120; the tongue was covered with a thick brown fur, and dry, the edges were fiery, and the whole tongue was dotted over with elevated papillæ—here and there protruding through the fur coat. The stomach was so excessively irritable that it would scarcely retain a tea-spoonful of water. I suggested an enema consisting of a *strong* solution of nitrate of silver, which was twice or thrice repeated during the

ensuing twenty-four hours. Also camphor spts. and oil of turpentine, equal parts, to be applied almost hot, to the abdomen. It was of no use. The disease increased in severity. We looked upon the mortal issue as being but a few hours in advance of us. Here was our extremity, and *cold water* was the straw caught at. What miraculous buoyancy there was in that dernier resort! We left off medicine entirely—little use was it when none would be retained by the stomach—and determined to try cold water. We wrapped the patient in a cold wet sheet, and thereupon—having previously passed a stool every ten or fifteen minutes—he lay one hour and a half without desire to go to stool. At the end of this time the surface almost glowed with warmth, and there was the moisture of sweat about the face and neck. The patient was then wiped dry with coarse towels and placed in bed. This operation was thenceforward repeated every five or six hours for the next five days, after which time it was only used once or twice in twenty-four hours for two or three days longer. Instead of the warm fomentations, which had been constantly applied, cloths wrung out of cold water was frequently applied to the abdomen. As enemata, we used cold water simply—8 or 10 ounces immediately after every evacuation. In every case in the treatment of which we used cold water injections, it was found to be important that it should be administered immediately subsequent to every stool. They were borne without distress, and much longer. I ought also to mention that, after the first day, we used the Sitz-bath of the Hydropathists. From the commencement of this treatment, the irritability of the stomach was entirely appeased; the stools became less and less in frequency and of a more natural appearance and consistence. As a diet, as well as an auxiliary to the treatment, we ordered the animal broths, well salted.

Several other cases I have in my mind of a like character with the above. With the exception of one, however, none of them were so violently attacked. That case being of a more robust habit, the disease did not succumb so readily. I commenced treating with calomel, ipecac. and *one grain* of morphine every three hours—at the end of twenty-four hours giving a castor oil laxative—warm fomentations to the abdomen; enemata of cold water and laudanum. This course was kept up with more or less modification until the expiration of the week. I was not flattered by the progress my patient

had made for the better. I then resorted to the water treatment—carrying it out as in the first instance. Upon the first using of the wet sheet, the bowels were quieted two hours—having been previously moved as often as from 15 to 30 minutes. The patient kept right on improving—steadily yet, I confess, slowly. It was gratifying to see the complete relief from the excruciating tormina and tenesmus which followed the “wet sheet packing.”

In this case I used, as often as once in four hours, the turpentine emulsion, strongly charged with laudanum. I also occasionally ordered laudanum in the injections.

In many cases, the cold, wet bandage and cold water injections were used as auxiliaries to other treatment, and with highly gratifying effect.

I am so thoroughly convinced of the powerful efficacy of cold water in the treatment of dysentery, that I do not hesitate to say I regard it as *one* of the chief remedies for combatting that formidable disease.

Dr. Bennett, of this place, a practitioner of many years standing, and a correct observer, after being repeatedly disappointed by depending upon the ordinary remedies alone, is, upon fair trial, in many instances, enthusiastic in his confidence in cold water as a powerful auxiliary in treating dysentery.

It would be absurd to argue a general rule from such limited experience; yet its effects have been so highly gratifying in the hands of many practitioners, that it is hard to resist the conviction that cold water deserves a more honorable place among the therapia of dysentery than it has hitherto obtained.—*N. W. Med. & Surg. Jour.*

PART THIRD.

FOREIGN INTELLIGENCE.

PRACTICAL MEDICINE.

On Irritable Bladder in Children. By CHRISTOPHER FLEMING, M. D.

Irritable bladder occurs much more frequently in young children than would at first sight appear, and this, where the irritability is

not the consequence either of inflammation or of organic disease, although occasionally attributable to some abnormal defect. The mother or nurse of the child so affected states, that the child is constantly applying the hand to the organs engaged; that it appears to suffer pain during micturition; that the act is frequent; that it is urgent, but when the urine has passed off the child appears relieved; that often, if the urine falls on the floor or clothes, it rapidly becomes muddy and whitish, and it is even stated by some, that it is so at the moment of being passed; that when the child sits down for such purpose, it has an inclination to remain longer than is requisite, and, in some cases, that there is a disposition to prolapsus of the rectum, from the forcing and straining attendant, and very frequently a discharge of bloody mucus from the rectum takes place; that these symptoms have continued for some time, notwithstanding the exhibition of medicines to regulate the bowels and produce other ordinary effects; that the child is losing strength and wasting in flesh; that the appetite is most precarious, and that there is a great desire for drink; that the quantity of urine passed is very variable, sometimes deficient; that its quality is equally changeable, at times being pale, at others deep in color, and again clear and often muddy, and with copious sediment.

If accurate inquiry is now instituted, it will be found, that many such children are born of gouty parents, or of persons much subject to dyspepsia, and that they are children whose diet and habits of life are irregular; and in the humble walks of life that they are, in addition, irregularly clad and irregularly cleansed: such are by no means of unfrequent occurrence. The quantitative and the qualitative analysis of the urine satisfactorily explains the symptoms; and attention to the physical condition of this secretion, to its chemical constitution, and to the appearance of the deposits—particularly the deposits of rest—assisted by the microscopic characters of the latter, point out the curative indications which are suitable to each variety of case. It is beyond all manner of doubt, as in adult age, many practical hints can be taken from attention to the general constitution of the urine in the surgical diseases of these organs, and that in the child the normal essential constituents of this important fluid may be increased or diminished, and that abnormal ingredients may

be superadded. We have here the lithic, the oxalic, and the phosphatic diatheses, and each has its special influence. In fact, with few exceptions,—and the presence of sugar in the urine of children is one worthy of note,—there is no derangement of the urine found in the adult which I have not also found in the child, in its most exaggerated form, both as regards the disproportion between its normal constituents, and the introduction of abnormal substances. I feel perfectly satisfied that attention to these details, as subsidiary means, will be found of value in the diagnosis and treatment of many of the diseases of children, and especially in those cases of cerebral complication which so repeatedly puzzle the practitioner, and where the quantity of this secretion, on the one hand, is materially diminished, or, on the other, increased.

With a view to the practical study of the morbid condition of the urine, as auxiliary to the diagnosis and treatment of diseases of the urinary organs in the child, I find it difficult to condense my remarks so as to avoid the introduction of any irrelevant matter, and at the same time to escape the charge of an attempt to undervalue those more minute particulars to which, justly, much importance is attached. In my lectures on these subjects, I have been in the habit of directing attention to the color and smell of the particular specimen under examination, to its chemical reaction, and to its density; and I have always attached very great importance to the *deposit rest*, *as to shade and outline*, and to the transparency or otherwise of the supernatant fluid. From an analysis of these several leading features of urine I have derived the greatest advantage, and even, in the absence of any microscopic examination, have been enabled to decide in very many cases, with sufficient certainty for practical purposes, on the peculiar nature of the deposit. Of course in some, particularly the “non-crystalline organic deposit,” the assistance of the microscope is often indispensable; but in children they do not constitute the majority of the cases met with. As attendant on the “irritable bladder,” I would say that, according to the classification of urinary deposits by Golding Bird, those of uric acid, and the urate of ammonia, and of oxalate of lime, are particularly frequent in occurrence; and that, next in order of frequency are conjointly or separately with these “the non-crystalline organised products,”

such as blood, pus, occasionally mucus, but very often indeed vibri-ones. It would be too great an occupation of space and of time to enumerate the many cases I have witnessed, as illustrative of these statements; they are of almost daily occurrence. I do not deny that phosphatic deposits are to be met with, but these deposits do not occur, under ordinary circumstances, as a substantive deposit in the urine of children. The prisms of the neutral triple phosphate are to be seen conjointly with the crystalline deposits above specified, just as in adults, but it is very rare indeed to meet with them as solitary deposits, although so frequent in advanced life; and it is equally rare to find them combined with that physical and chemical condition of urine almost necessarily present under such circumstances. Indeed I find it difficult to bring to my recollection—unless under the most aggravated form of vesical and renal disease, complicated with phosphatic calculus in the child—that excessive secretion from the mucous membrane of the bladder which takes so very prominent a part in the formation of such deposit in advanced life. Amongst the numerous cases of urinary disease I have witnessed in the child, such is excessively rare, and it is equally rare as a symptom of calculus in the child. There was in one case a source of deception, which was by the merest chance unfolded to me, and which, perhaps, may be noted as confirmatory of Sir Benjamin Brodie's opinion as to the special source of those phosphatic salts in the urine.

In May, 1852, a boy, aged three years, was brought to my study by his mother, in great alarm from the suffering the child had endured for some weeks in passing urine. There was frequency and urgency, and so much forcing and straining as to produce distressing prolapsus ani. The urine was largely loaded with lithates, and contained a remarkably tenacious mucous deposit, deeply colored with blood, and adherent to the glass. I found in it numerous blood discs and large crystals of the triple phosphate. Symptoms not improving, I felt justified in sounding the child, which I did with a silver catheter, and whilst the urine was escaping, a severe paroxysm, resembling a fit of the stone, occurred, during which a considerable quantity of gelatinous mucus escaped from the rectum. I collected the urine drawn off through the catheter in one test-glass, and the

discharge from the rectum in the second. The urine was acid, the latter alkaline; the former was loaded with lithates interspersed with some crystals of oxalate of lime, the latter, in addition to mucus, blood globules, and epithelial scales, was studded with large, distinct, triple, phosphatic prisms. I merely mention these details incidentally, as interesting and not unimportant phenomena, and particularly in connection with the statement of Sir Benjamin Brodie already alluded to. They were to me then novel, and I took the opportunity of showing the microscopic appearances and the specimens to my colleague, Dr. Hutton. I have since been enabled to confirm them.

I have said that the lithic acid and lithate of ammonia deposits, and also that of the oxalate of lime, are the most frequently met with in children, and they will be found to be productive of most decidedly distressing urinary symptoms. I have often found these deposits present conjointly; very often the oxalate of lime and the urate of ammonia, the latter cloaking the former, unless carefully looked for. I have found the red sand, as the lithic acid is sometimes termed, in the child, but it is far more frequent to find the colorless, or nearly colorless, crystals of lithic acid, and all are met with of every variety of shape and form, and they are to be seen in the children of the poor as well as of the rich; and really it does not appear that diet very materially influences their presence or their character. I have a boy, aged about seven, now in hospital, with suspected calculus in the bladder, and in him numerous crystals of pale lithic acid exist in combination with oxalate of lime; whilst in another ward in the same hospital, there is a boy, somewhat about the same age, a patient of Dr. Hutton, in whom the red sand is visible to the naked eye in the test-glass, floating through the urine, and under the microscope the deep orange crystals are to be seen distinct, and in large aggregated masses. It is in this class of deposits, and in that of the oxalate of lime, that the surgeon requires to be more circumspect, as the physical and chemical characters of the urine are often not remarkable. The color is in such cases often pale; the density very low, so low as 1007 to 1010; the deposit a mere tomentous, semitransparent cloud, but one which will not escape detection by the practised eye. The suffering experienced in some cases of this nature is really very great; and if the child happens to have a long narrow prepuce, or an abnormal opening in the urethra, he may be put to unnecessary torture from inattention to the

morbid state of the urine. I have known such cases: one, a fine child, the only son of a fond father, who lived freely, and thought the child could not do better; the other, a boy aged three years, with hypospadias, from which the child had not previously experienced any visible inconvenience. In each the usual traces of symptoms of irritable bladder existed; in each, the ordinary clear condition of urine diverted attention from the examination of its actual state; and in each, its normal restoration caused the subsidence of all annoyance. I do not dwell on the lithate of ammonia deposit; its characteristic appearance is too obvious to require any comment. I shall merely add, in conclusion, as regards it and the other crystalline deposits noted, that when from their continued presence they produce local or general irritation, they demand the watchful care of the practitioner to put rigidly in force those dietetic and therapeutic means which are laid down in systematic treatises on the subject; and if the symptoms do not yield to such treatment, he should search for some local cause either in the bladder or in some portion of the organs implicated; and he should also bear in mind, that such character of urine is the most likely to lead to the formation of stone in the bladder, as proved by its composition in the child, and by the fact of its being the most common attendant on its presence when found there; and that hence two practical lessons should not be lost sight of, namely, to alter, as quickly as can be effected, this morbid condition of urine, and to suspect the presence of calculus, should it be obstinate.—*Dublin Quarterly Journal*.

From the *Gazetta Medica Toscana*, p. 44. *Dublin Quarterly Jour.*, Feb. 1853.

ART. VII.—*On the action of the Subnitrate of Bismuth.* By DR. FILIPPPO LUSSANNA.

The subnitrate of bismuth, a medicine already well known, has been lately used with new indications and pharmacological applications. Notwithstanding the fear which previously existed in its local caustic action, Monneret has recently recommended it in large doses as a topical (internal) anodyne in various gastro-intestinal affections, gastralgia, diarrhoea, dyspepsia and cholera. He, following the fashion of many of his countrymen, ignored almost every general action of this preparation, and declared that its therapeutic efficacy is purely local, and that, far from being irritating, it is ab-

sorbent and calming. Monneret has rendered much service to science, by destroying, so far as this remedy is concerned, the Orfillian scare-crows which still not a little impede the rational interpretation of pharmacological facts. But, at the same time, I do not believe that all his deductions are correct and true, when he entirely denies the general effects of this metal. Following his directions, I have administered the subnitrate of bismuth in the large doses given by him. The patients so treated were affected with tubercular diarrhœa, the consequence of chronic enteritis, gastralgia of long standing and mesenteric disease. From the study of the effects of this remedy, I have been able to deduce the following inferences,

1. It is true that it does not give rise to intestinal irritation.
2. I have not seen it arrest tubercular or mesenteric diarrhœa.
3. The fæces always acquired a blackish-yellow color, owing to the unassimilated portions of the medicine being converted into sulphuret of bismuth by contact with the sulphureted hydrogen of the fæcal masses.
4. The excrement, although still presenting the character of diarrhœa, was always rendered less liquid in consequence of admixture with the powder.
5. The subnitrate of bismuth is in part assimilable, and some portion of the large quantity swallowed is really dissolved and absorbed. This takes place with many other medicines, of which only a portion can be dissolved or absorbed, while the remainder passes unacted on, when the remedy has been given in large doses, through the intestine. Such is the case with calomel, iron and kermes, among metallic preparations.
6. The assimilation of subnitrate of bismuth, is due to the acid action of the fluids of the stomach, which render it soluble. Any portion that reaches the intestine, whether undissolved or dissolved, cannot be digested or absorbed, because the alkaline chlorides of the intestinal tube have no solvent effect upon it, and precipitate it if dissolved. In this second point of view, Monneret would be quite right in denying the effects of this salt on the economy in general, and in denying its absorption. The subnitrate of bismuth is soluble in acidulous matters, and, consequently, can be digested in the stomach. Thus we can understand how Trousseau and Pidoux, who

were also ignorant of the general action of the salt, should, notwithstanding, caution us against administering it when gastric affections are attended with eructations—in which, say they, “the medicine almost fails,” since, by rendering it more soluble and assimilable, the presence of medicine developes its dynamic action.

7. The non-appearance of the subnitrate of bismuth in the urine does not exclude the possibility of its having been introduced into the circulation. In fact, the subnitrate, having entered the current of blood, is, by the action of the alkaline chlorides of the serum, restored to the state of an insoluble subsalt, and thus becomes incapable of passing off by the uriniferous emunctory.

8. The effects of bismuth, thus introduced into the economy, are colliquative and scorbutic. The patient acquires a leaden aspect, the eyes become sunken, and present a livid subpalpebral circle; the breath is rendered offensive, the gums swell, grow livid, and discharge a sanious blood; hemorrhage is easily excited, and sometimes profuse passive hemorrhages arise. I had once under my care a case of dangerous and repeated epistaxis produced by it in mesenteric tuberculosis. Sometimes blood is seen in the expectoration; finally, the alvine dejections are occasionally melanic. Everything announces a solvent action on the globulin, similar to that produced, according to the experiments of Dumas, by the chlorides of potassium, sodium, and ammonium, which dissolve blood corpuscles. It might be classed among Miahle’s fluidifying agents.

9. Therefore, when we wish to prevent the absorption, or the true medical action of the subnitrate of bismuth, to localize its action, and produce none but its mechanical absorbent effects, the rational mode will be to precede or accompany its administration by the exhibition of an antacid, as, for example, calcined magnesia, so as to neutralize and fix the solvent acid gastric fluids. And this, of course, will also be the chemical antidote of the preparations of bismuth, with the view of preventing their assimilation, while the preparations of iron and stimulants will be useful in counteracting their general or dynamic effects of producing scurvy—fluidifying and dissolving the hematin.

ART. II.—*Cases of Poisoning with Lucifer Matches.* By C. TRENBERRY, Esq., Surgeon of the Civil Hospital, Gibraltar, and corresponding Member of the Surgical Society of Ireland.

Three cases, within a very short period, wherein Lucifer matches were swallowed for the purpose of self-destruction, have presented themselves to my observation. Two of them proved fatal; the third recovered.

The history of these cases may be related in a few words: one, a young Spanish lady, resorted to the expedient from disappointment: the other was a Spanish widow, mother of three children, who, having committed herself with a young man aged 18, hoped, by taking the poisonous substance, to induce him to marry her. The contents of the stomach were dislodged, and she recovered.

The third case was that of a native, aged 22, who was engaged to be married, but unfortunately too close intimacy with her lover prior to this rash act, exhibited itself, she being in the seventh month of pregnancy. Her aunt states that at no time were the symptoms very urgent, nor is it known when the matches were swallowed.

The deceased first complained of pain in the stomach at 5 A. M., on Tuesday the 17th of May, 1853, for which some "Yerba Louisa" tea was given, which relieved her. At 8, A. M., she reluctantly partook of an egg and some tea for breakfast, and at eleven o'clock had some broth but could not bear the sight of bread. During the day she complained of thirst and giddiness: in the evening took tea and went to bed. The next morning, the 18th, about 6 A. M., still suffering from pain and giddiness; her aunt gave her a dose of castor-oil, which she ejected immediately, and frequent vomiting supervened during the day. An enema of the decoction of marsh mallows and olive oil was administered, which afforded temporary relief.

In the evening, she confessed that she had taken two boxes of lucifer matches, containing about one hundred. A medical man was immediately consulted, who ordered an emetic and olive oil, which she said relieved her very much; but vertigo, vomiting, intense thirst, slight convulsions and syncope, followed in rapid succession, and after midnight she became insensible, and expired at 6 A. M., on the 19th. The following day, at noon, I made a post mortem examination, and noted the following: Body well formed, but short of stature. Face has a distorted and dirty appearance from irreg-

ular patches of congestion. Globe of the eyes very prominent; cornea of a dry and dull appearance; pupils dilated, and blood oozing from the nostrils. Livid spots about the lips, gums, and tongue. Upper part of the shoulder quite green, and emphysema from decomposition. Breasts plump, and nipples marked by darkish areola and papillæ. Abdomen distended, and tympanitic, but no appearance of decomposition except in the folds of the groins. Vagina plugged by a dark coagulum of blood; the os uteri dilated to about the size of a shilling, and the head of a child pressed against it, as if labor had commenced prior to death. Dark, feculent, or tarry looking matter escaping from the anus. Finger-nails livid, as also back part of the anus, and depending parts of the sides of the body, and in some parts it is quite green. Lower extremities pale and chlorotic-looking; the calf of the left leg being hard and globular, as if affected with cramp. Gas escaped with a hissing noise from the aperture made by the saw in opening the skull. Dura matter dry and glistening; substance of brain so much softened as to prevent the usual examination. Ventricles very dry. Cerebellum a perfect pulpy, or custard-like mass. The encephalon throughout of a dirty cream color. Pectoral muscles soft and easily torn. Lungs dark colored, but crepitant; their posterior portion congested, as is usually observed after death. Pericardium contained about two ounces of dark bloody serum. Heart pale and flabby: auricles and ventricles empty. Abdominal viscera had a dull appearance. Stomach greatly distended with gas—its external appearance healthy looking. Small intestines collapsed; large intestines not so distended as is usually seen. Anterior surface of liver pale. Gall-bladder empty. Spleen very dark colored. Uterus contained a well formed but dead female foetus, of about seven or eight months, floating in the liquor amnii, the membranes being unbroken. The cellular tissue and depending or posterior portions of the liver, pancreas, spleen and kidneys, unusually congested, amounting almost to extravasation of blood. The pharyngeal and cardiac end of the œsophagus of a dark or bruised color; the canal appears contracted, and the mucous membrane dry, one rounded, carbonaceous head of a match adhering to its surface. Stomach contained about four ounces of a dark, unctuous, treacly-looking fluid. The mucous membrane of a whitey-brown color, and the cardiac or larger end thickly vesicated, as if scalded; the middle portion retained its rugous appearance, although thicker and paler

than usual. The pylorus quite smooth, pale and thickened, as also the mucous membrane of duodenum, which, with about three feet of the jejunum, contained a similar black looking fluid as the stomach. The remaining portion of small intestines were merely lined with a creamy, feculent substance, interspersed with patches of greenish or bilious matter.—*Dublin Med. Press.*

ART. III.—*Further Researches on the Pathology of Phlegmasia dolens.*

By ROBERT LEE, M. D., F. R. S., &c.

At a late meeting of the Royal Medical and Chirurgical Society of London, Dr. Leeread a paper on this subject. The author commenced his paper by observing that it was not till the publication of M. Bouillaud, M. Velpeau, and the late Dr. Davis, that the true nature of this disease was known. Up to this period various hypotheses had been advanced respecting the cause of the swelling in the lower extremities of puerperal women—mere speculations unsupported by facts; but the cases and directions of the authors just enumerated, demonstrated that the true nature of the disease consisted in an inflammation of the trunks and principal branches of the veins of the lower extremities. In papers by the author, published in the fifteenth volume of the *Transactions*, the actual condition of the iliac and femoral veins was ascertained, and he had been led to infer that inflammation of the veins gave rise to all the phenomena in puerperal women of phlegmasia dolens, and that it commenced in the uterine branches of the hypogastric veins, and subsequently extended from them into the iliac and femoral trunks of the affected side. Other cases had been recorded in the *Transactions*, of crural phlebitic following ulceration of the mucous membrane of the intestines. Experiments performed by Pirigott in 1539, and by Reumert in 1860, on dogs, showed that the action of the chemical and mechanical irritants was limited to the vein on which the experiment was made, and the extension of the inflammation in the veins was not common; and Stanius, who had collated and tested all the facts bearing on the subject, doubted whether inflammation of venous trunks admitted of being excited by constitutional causes, independently of local irritation. A series of experiments on the veins of the lower animals, similar to those just mentioned, had recently been made, and a paper on phlegmasia dolens had been read to the

Society during the present session, not founded on actual observation of the disease as it occurs in the human subject, but upon experiments on the veins of the lower animals, in which phlegmasia dolens had never been observed. The object of the present communication was to submit to the Society the observations which the author had made during the last twenty-four years in inflammation of the crural veins. The paper contained the record of forty-three cases of phlegmasia dolens. The first nine cases were accompanied by post-mortem descriptions, and preparations illustrating the disease; and the author was led, from the whole of the facts thus aduced, to the conclusions he had formerly expressed, "that inflammation of the iliac and femoral veins gave rise to all the phenomena of phlegmasia dolens, and that the inflammation commenced in the uterine branches of the hypogastric veins, and from them extended to the iliac and femoral trunks of the affected side." The next series comprised the history of twenty cases, which the author thought furnished additional evidence in favor of this conclusion, though, in consequence of the recovery of the greater number of the patients, an opportunity was not afforded of determining by dissection the actual condition of the crural veins. Nine cases followed, which demonstrated that phlegmasia dolens might occur wholly unconnected with pregnancy and parturition, and that in such cases the inflammation likewise commenced in the uterine branches of the hypogastric veins, and followed a course similar to what occurred in puerperal cases. In some of these the inflammation of the uterine veins was produced by cancerous disease of the os and cervix uteri; in others there was no organic disease of any kind previously existing. The concluding cases were five, in which crural phlebitis had followed inflammation of the saphena veins, and of the deep veins of the lower extremities from fracture of the tibia and fibula, and the pressure of encephaloid tumors on the thoracic viscera. The author thought that these cases and dissections, as well as those of the distinguished authors whom he had quoted, proved in the most conclusive manner that inflammation of the iliac and femoral veins was the proximate cause of phlegmasia dolens; and that in puerperal women this inflammation commenced in the uterine branches of the hypogastric veins. It had likewise been demonstrated by morbid anatomy that phlegmasia dolens was a disease which might take place in women who had never been pregnant, and even in the

male sex, and that, under all circumstances, the proximate cause was the same.

Dr. Mayo inquired if, in the cases of phlegmasia dolens recorded by Dr. Lee, any peculiarity antecedent to the inflammation of the veins had been noticed?

Mr. Streeter asked if Dr. Lee had statistical information to give respecting the comparative frequency of the disease?

Dr. John Clark enquired if phlegmasia dolens, in the common acceptance of the term, and independent of other disorders, was always the result of inflammation of the veins. He thought the disease generally was very mild, and, in the experience of writers on the subject, not a fatal one.

Dr. Mackenzie said, that in the discussion of such questions as that which is now before the Society, it appeared to be important to distinguish between the facts which are alleged and the conclusions which are drawn from them. Now, in the present case, the facts alleged are, that certain lesions of the crural veins are developed in the progress of phlegmasia dolens. The conclusions are that such lesions constitute the essence or proximate cause of the disease. He (Dr. Mackenzie) assented fully and entirely to the first of these propositions, whilst he dissented as fully and entirely from the latter; and, as he was unwilling to enter upon the discussion of this question in a controversial spirit, he would make no reference whatever to the investigation which he had lately submitted to the Society on the subject of this disease; but would confine himself to a statement of such facts as were known to the profession, which appeared to him to be opposed to the theory of the disease which had been affirmed by Dr. Lee. The disease known as phlegmasia dolens was a very complex malady. It was one which was characterized not only by a morbid condition of the veins, but by a morbid condition of the sensory, the motor, the lymphatic, and the secretory organs of the affected extremities also: and, accordingly, in all well-marked cases of the disease, there was exquisite sensibility of the limb, especially in the track of particular nerves, loss of motor power, amounting sometimes to perfect immobility of the extremity, inflammation and obstruction of the lymphatic vessels and glands, and a general, hot, tense and elastic swelling of the limb, not simply arising from œdema, but possessing the character of active exudation from passive effusion. Now, could all these lesions depend upon or be deduced from mere inflammation and obstruction of

the principal vein of the extremity? Were they ordinarily observed in cases of simple uncomplicated phlebitis? Or, if not, was there anything in the anatomical or physiological characters of the veins to justify our deducing *a priori* from it? And if we replied to these questions, as he submitted that we must, in the negative, he should ask whether those who adopt this theory have undertaken any particular investigation for the purpose of determining this point? Or, in other words, have they reproduced the lesion of the veins in a simple, uncomplicated form, and observed such consequences to follow. Now, to these questions we must also reply in the negative, and it must be added that the whole matter rested on assumption. It had been assumed that because the crural veins were found obviously diseased in fatal cases of phlegmasia dolens, such lesions constituted the proximate cause of disease. No further steps had been taken to establish the truth of this doctrine, and that, therefore, had been taken as a matter of assumption, which ought to have been made a matter of demonstration. Further, he would observe, that the clinical history of the disease and the progress of symptoms did not support this theory. It was quite true that in some cases the first irritations commenced in the region of the femoral vessels, but in others it was far otherwise; insome they commenced in the back, in others in the hip, sometimes in the calf of the leg, and more frequently in the popliteal region. A gain, one leg might be affected alone, or both concurrently; or the disease, after having attacked one, may pass on to the other, or a superior extremity might be affected; and he had lately met with a case in which, after symptoms of the disease had successively declared themselves in the left lower and upper extremities, the malady ultimately established itself in the right arm, the whole right upper extremity being hot, swollen, and tense, the surface exquisitely painful, with loss of motor power, and tense, corded condition of the basile vein. Now, it appeared to him that these facts were inconsistent with the theory that the proximate cause of the disease was essentially inflammation of the crural veins. They pointed to the existence of some more general and diffusive cause, in regard to which it was probable that phlebitis itself was but a secondary affection. Again, he would point to the general experience of the profession as being opposed to this theory. It was now upwards of thirty years since it was first promulgated by his friend and teacher, the late Dr. David Davis; and although the facts upon which it rested were well known, it was very far from

being generally adopted. Thus, in this country, Dr. Burns affirmed that the nerves were as much affected as the veins. Others regarded the lymphatic vessels as being principally affected; whilst many, dissatisfied with these restricted views of the pathology of the disease, preferred the theory of the late Dr. Hull, that it consisted in general inflammation of the several organs and structures of the affected limb. So again, on the continent, the greatest difference of opinion existed respecting its nature and pathology; and whilst many affirmed that it consisted essentially in inflammation of the lymphatics, and others that it was a specific inflammation of the cellular tissue, nearly all agreed that in its general characters it differed widely from ordinary phlebitis. Now, this diversity of opinion existed, notwithstanding that all were aware of the facts upon which the phlebotic theory of the disease rested; and it afforded a powerful argument against it, because it tended to show that when tested by general experience, and considered irrespectively of particular facts, and free from bias, it failed to account rationally for all the known phenomena of the disease, and consequently, could be regarded as its proximate cause. Then, in the sequela of the disease, circumstances are met which are inconsistent with this theory. We know, for instance, that after an attack of the disease, the crural veins were generally left impervious or obliterated, and yet it would happen that successive attacks of the disease might occur in the same extremity. Now, if it was true that the first attack left them in the condition described, it was difficult to understand how, having functionally ceased to exist, they could again take on functional activity, and become the seat of active inflammation. So also it happened, after an attack of the disease, that the limb would be left many years, or even for the remainder of life, in a weak, sensitive and irritable condition, being easily affected by atmospheric and constitutional influences. It was easy to reconcile these facts within the notion that the nerves had been injured or damaged by the attack, but not with the idea that the veins alone had been affected. On all these grounds, then, it appeared to him (Dr. McKenzie) that the phlebotic theory of the disease was either defective or erroneous. But assuming for a moment that it was correct, he would yet observe that it left much which was still to be explained. We had yet to learn the nature of that peculiar inflammation of the veins which was so exceptional and so different from ordinary phlebitis. Did it

depend upon some peculiar disposition on the part of the venous coats to take on diffusive inflammation, or did it depend primarily on the blood? If we adopted the first of these theories, we were bound to state the nature of the peculiarity, and the laws of its development. For, to be satisfied with merely giving it a name and to speak of it as a "specific" inflammation, was not to advance our scientific knowledge, but rather to take refuge, or to hide our ignorance under the shadow of a name. If, on the other hand, we accepted the latter view, and regarded the inflammation as dependent upon some morbid condition of blood, then, indeed, we might reasonably account, not only for the peculiarities it presented, but for all the several lesions of other organs, and the structural changes with which it was associated. Upon this view, also, we might reconcile the conflicting opinions respecting the nature of the disease which had been held by different pathologists, and the variations which it manifested in its symptoms and progress, in its different forms. But, in accepting this view, we must forego the theory that phlebitis was the proximate cause of the disease, and regard it, as it really was, as a secondary rather than a primary phenomenon; related to the other lesions of the extremity not so much in the order of cause and effect, but as being like them a parallel effect of some more general and diffusive morbid agent.

Dr. Lee, in his reply, entered into the literary history of the disease under discussion, from the time of Moriceau to the present. He particularly dwelt upon the facts originally published by the late Dr. Davis, and showed at great length his (Dr. Lee's) own labors in this disease. In answer to Dr. Mayo, he said that there were no antecedent symptoms calling for any treatment. He knew nothing of the comparative frequency of the disease. In respect to the views advanced by Dr. McKenzie, he could only say that, whilst he (Dr. Lee) admitted that there might be a blood disease present, it was consecutive to the inflammation in the veins. The inflammation was in reality the proximate cause of the disease. The scalpel had shown this; he thought that was sufficient, and could not understand what further was required.—*London Lancet*.

ART. IV.—*Stomatitis Materni*.

"Has this disease ever existed when the symptoms of *general* disorder were not accompanied by it, traceable to either retention or

suppression of bile?" In the last 15 years I have not found it necessary to take the child from the breast, and my practice has been based on a negative answer to this question. I have witnessed two post obit. examinations of patients, who labored, at time of death, under this disease, in each the gall bladder and duct were clogged with calculi and thickened bile. In the living patients I have observed, in almost every instance; 1st, an anemic condition; 2nd, acidity of stomach, 3d, as a consequence of the last, urinary deposits, *invariably relieved by the free use of alkalies*; 4th, the alvine evacuations either hard or black, denoting the absence of the natural and accustomed stimulus to the bowels, or clay colored, with a tendency to diarrhœa, showing both a want of biliary presence, and the existence of fermentations, which never (I think) occurs when the proper proportion of bile is present.

The presence of anæmia I have not found necessary to the existence of the disease, but if present, it greatly adds to the chances of continuance. Indeed, it often produces the very state of things, on which, I think, the disease depends. In an anæmic condition it is difficult for the system to perform all of its *usual* functions, and at the same time support the new one now set up—the support of the infant, either in embryo or by lactation. For this support a *new* draft is made upon the energies of the system, and this draft is often made upon some *one* organ, instead of being distributed equally on the whole; that one must, of course, lose much of its energy; and, should it be the liver, we have want of its secretion; as a consequence, we have fermentation and acidity of stomach and bowels with its sequents, amongst which is ulceration of certain of the mucous membranes; and, to the existence of this condition of the membranes, neither pregnancy nor lactation are *necessary*, as it will be found under many circumstances in the absence of both these, though *never* under my observation without the previous withdrawal of the accustomed supply of bile. The only difference to be found in the disease under these different circumstances is, that during lactation or pregnancy it is more obstinate in consequence of the draft upon the energies of the system being continuous, and consequently renewing the disease as often as the remedies for its relief are withheld, or until the vital energies are increased by tonics, or otherwise sufficiently to meet the new demand without the special draft.—*Med. Gazette.*

MATERIA MEDICA.

ART. V.—*Treatment of acute articular Rheumatism by veratrine.* By
M. TROUSSEAU.

We have already spoken of this treatment, but consider it of so much importance as to refer to it again. One pill, we have said, containing the tenth of a grain of veratrine, is given the first day, two the second, three the third, increasing the dose one pill each day, and it is rarely necessary to go beyond six or seven. M. Trousseau, knowing the duties of physician and teacher, has not hesitated to experiment with this therapeutical agent before his numerous students; the results have been marvelous. A woman, aged 25 years, entered his wards with a general acute articular rheumatism of three days duration, complicated with endocarditis characterised by a souffle, to the first beat of the heart, extending itself into the calibre of the aorta, and into the arteries of the neck, plainly indicating a lesion of the aortic orifice. It was impossible to find a case more favorable for the therapeutic experiment on account of the extent and intensity of the complications. M. Trousseau gave a pill on Saturday; on Sunday there was already an amelioration of the symptoms, and he gave two pills. Monday, the fever, the inflammatory engorgement of the hands, &c., had almost disappeared: three pills were given. Tuesday, the day upon which M. Trousseau lectured upon the case, the health was perfect, except the condition of the heart. "A fact is but a fact," remarked the learned professor, "but I can hardly attribute this result to chance." Neither can we attribute it to chance, because we have seen M. Piedagnel employ this medicine with a success almost constant; and know many cases which prove its efficacy. The innocence, the insipidity, and the low price of veratrine, will make it, (if farther experience confirms the facts already noticed,) one of the most precious medicines which we possess. We must not pause upon so good a road. What is rheumatism, if not an inflammatory affection, associated with the rheumatismal diathesis? And on the other hand, in a number of cases, what is pleurisy, pneumonia itself, etc., if not inflammatory conditions produced by the same general influence, rheumatism? It is true that the erratic march of the inflammation establishes a sensible difference between acute articular rheumatism, and pleurisy, and pneumonia, but if the principle is the same is there not a reason

for trying the same remedy. We reason with reference to the specific antirheumatical power which veratrine seems to possess. But if this is not satisfactory it may be regarded in another sense, viz: as a powerful antiphlogistic or non-stimulant, and as such veratrine would be indicated in a general manner against inflammation, since it has been seen in the space of three days, in the dose of six-tenths of a grain altogether, to reduce the pulse. Perhaps we are indulging in too great anticipations with regard to the results of experiments with veratrine, and it will be necessary, at least at first, to limit its application to inflammatory affections, allied to rheumatism; among which we include pleurisy, pneumonia and neuralgia. The aortic souffle in M. Trousseau's patient, but this is often the case with any treatment, and M. Piedagnel asserts that there is a notable diminution in the diseases of the heart consequent upon acute articular rheumatism when it is treated with this medicine.—*Gazette des Hopitaux*.

ART. VI.—*Inhalation of Chloroform in Pneumonia.*

The late journals of Germany publish more than 200 cases of pneumonia treated by inhalations of chloroform. Far from being contraindicated in pulmonary phlegmasia, as had been thought up to the present time, chloroform on the contrary would seem, according to these facts, to modify favorably the inflammatory process of the lung. From among the observations published, out of 193 cases treated by Drs. Wachner, Baumgartner and Schmit, only nine died. Of twenty-three cases reported by Dr. Wawentrapp, of Frankfurt, nineteen were treated exclusively by chloroform, and only one died. Every two or three hours the patient is made to inhale the vapour from fifty drops of chloroform, during ten or fifteen minutes so as never to let the effects reach to a loss of consciousness. All the patients were of adult age, and the disease upon an average had reached the fifth day. In every case it was observed that the chloroform had a diaphoretic effect, which was sometimes produced by the first inhalation, and never failed to manifest itself on the third or fourth day. It gradually diminished the local pain, and caused it to disappear; it calmed the thoracic anxiety, brought back the respiration to its normal type, always appeased the cough, facilitated the expectoration in rendering it less abundant; and, lastly, it reduced the febrile reaction and induced a refreshing sleep three or four days after the inhalations were commenced.—*Gazette des Hopitaux*.

SURGERY.

ART. VII.—*On the Use of Collodion for erections accompanying Blennorrhagia.* By Dr. DORRINGER.

In the *Med. Central Zeitung*, there is reported a case of a rather curious application of collodion for gonorrhœal erections, and the result was such as we would like to see borne out by other cases: A young man, aged 28, was attacked for the third time with a blennorrhagia, which was accompanied with such severe and painful erections that the patient could hardly stay in bed for half an hour. After having tried, without avail, both camphor and narcotics, Dr. Dorringer ordered cold fomentations, and when the penis had assumed its natural size, the application over its whole extent, even including its prostatic portion, to a strong coating of collodion. This had the desired effect, for from that moment the patient had no erection, and suffered only from a slight scalding in passing urine. What proves that the amelioration was really due to the means employed is, that on the morrow, the collodion being taken off, the erections returned, but not so severely, and again ceased on the application of a fresh coating of collodion.—*Med. Times and Gaz.*, from *Rev. Med. Chir. de Paris*.

PART FOURTH.

BIBLIOGRAPHICAL NOTICES AND REVIEWS.

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1. *The Action of Medicines in the System, or "on the mode in which Therapeutic Agents introduced into the Stomach, produce their peculiar effect on the Animal Economy."* Being the Prize Essay to which the Medical Society of London awarded the Fothergillian Gold Medal for MDCCCLII. By FREDERICK WILLIAM HEADLAND, M. R. C. S., etc., 8vo. pp. 560. Philadelphia, Lindsay & Blakiston, 1853.

We often boast of the rapid strides we are making in professional discoveries and improvements, and we certainly have cause to congratulate ourselves and the world upon the fact that our progress is equal to that in any of the arts or sciences—but we have to acknowledge with much regret that our knowledge of the *modus operandi* of medicines, even in this enlightened day, is not much greater than it was centuries ago. But little advance has been made in this department of medical science, while we acknowledge that the importance of this subject is equal at least to any other, we must hail, with considerable enthusiasm, the announcement of any work which promises to illuminate to any considerable extent this benighted subject.

The fact that Dr. Headland has secured the Fothergillian gold medal from the London Medical Society, is almost a guaranty that his work will produce an era in the history of Therapeutics. We have read a portion of it, and from its examination thus far, we are remarkably pleased with the author's plan and his style. We take great pleasure in recommending the work to the favorable consideration of our readers.

For sale by

J. H. RILEY & Co.

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2. *An Analysis of Physiology, being a Condensed View of the Most Important Facts and Doctrines, Designed Especially for the use of Students.* By JOHN J. REESE, M. D. Lecturer on Materia Medica, In the Medical Institute of Philadelphia, etc., etc., Second Edition, Revised and Enlarged—12mo. pp. 357. Philadelphia, Lindsley & Blakiston, 1853.

This little volume seems to be a tolerably accurate *resume* of Physiology. It was compiled by a young Philadelphian expressly for the use of Students who are probably preparing for the *green room*. For securing an outline of the grand science of which it treats, it is very well adapted to the purpose. It is a kind of epitome of Carpenter, which stands almost alone as an English work on Physiology. It is worthy the consideration of the student who has not time to study larger volume.

- 3.—*On the Diseases of the Liver.* By GEORGE BUDD, M. D., F. R. S., Professor of Medicine in King's College, London, etc. Second American, from the last improved London Edition, with Colored Plates and Wood Cuts, 8 vo. pp 468. Blanchard & Lee, Philadelphia, 1853.

We take great pleasure in endorsing the very favorable notices of this work by the various Journals of our country. The first edition was well received, and it is now too well known to require an extended notice at our hands. Although a work of great merit on a subject of the highest importance, particularly in our western country, which is full of Hepatic diseases it has not found an extensive sale. Physicians generally poor, especially in the early portion of their professional career, are almost obliged to content themselves with standard works on the general subjects of medicine and surgery. The *Monographs* have to be neglected until a thirst for more extended knowledge and pecuniary ability demand their purchase. As these do not always make their appearance in the person of *every* member of the profession the *Monographs* do not find a place in *every* medical library.

We can speak in the highest terms of "Budd on the Liver," and commend it to the careful perusal of every physician in the west.

For sale by J. H. Riley & Co.

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- 4.—*Medical Jurisprudence.* By ALFRED S. TAYLOR, M. D., F. R. S., &c., &c. Third American, from the fourth London edition. Edited with additions by Edward Hartshorne, M. D., one of the Surgeons of Wills' Hospital, etc., etc., 8 vo. pp 621. Blanchard & Lee, Philadelphia, 1853.

- A *Treatise on the Medical Jurisprudence of Insanity.* By I. RAY, M. D. Third edition, with additions, 8 vo. pp 520. Little, Brown & Co., Boston, 1853.

It is said that physicians never appear to so great disadvantage as when they are giving testimony before a jury. Were this not a fact it could scarcely as it has, become a proverb. Their ignorance, awkwardness, and disgraceful contradictions, are doubtless the result of entire neglect of Medical Jurisprudence as a subject of thorough study. The standing of our profession is wounded and

injured more in the estimation of the legal profession, and the world, in our courts of justice than in any other way. When a physician is summoned to testify in a case involving professional knowledge, if there are any to be found, he directly resorts to a work on Medical Jurisprudence, and in the course of a few minutes, with a mind entirely unprepared by experience or previous education, more than that of a ploughman or mechanic would be under similar circumstances, he rushes before the scrutinizing court with the utmost importance but to disgrace his calling, and to be torn to pieces and made ridiculous by a set of merciless lawyers. While this may not be the universal fact, the exceptions are altogether too few and too far between. There is no necessity for the existence of this state of things, and for a physician, with the means of education now in our possession, to be ignorant of Judicial Medicine, is entirely inexcusable.

The works whose title pages are at the head of this notice, are the very best in our country. Taylor has for a long time been the standard work on Medical Jurisprudence in Great Britain as also in this country. Ray is an able writer, and has left little or nothing further to be said on the subject of the Jurisprudence of Insanity. His chapter on "the duties of the Medical witness," is said by eminent judges to be worth the price of both volumes. They are gotten up in the best style of their respective enterprising publishers, and reflect the highest credit upon them and their learned authors.

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PART FIFTH.

EDITORIAL AND MISCELLANY.

Volume Sixth.

As the present number commences the sixth volume of "The Ohio Medical and Surgical Journal," we take the opportunity to offer its patrons and readers our grateful acknowledgements for their patronage and support. Indeed, we should deem ourself *ungrateful* were we to withhold such an expression. Our Journal is now entirely beyond embarrassment, and will continue to be so if its friends meet

promptly their indebtedness. We ask them most respectfully to do so. We have been cheered not only by the constant enlargement of our subscription list but by the frequent expressions of satisfaction on the part of many of our most intelligent subscribers with the character of the Journal. At the commencement of our editorial labors we had no expectation of meeting the demands of our readers and rendering such general satisfaction. *Then* our intentions were as pure as now but we lacked experience. In the future we shall be more familiar with our duties, and shall endeavor to make our Journal a practical one—an exponent of the orthodox doctrines and sound practice of our profession. Ours is a *Western Journal*, and we expect to make it worthy the patronage of Western physicians.

New Subscribers.

We take the liberty to address copies of this number to many physicians who are not as yet subscribers to our Journal. We do this because we cannot employ an agent, and because we know there are many physicians in our country who would be glad to subscribe for it were they acquainted with its merits. This we would not say boastingly, we but speak the sentiments of hundreds who have written to us on the subject. If, on careful examination, you, gentlemen, who have not had an opportunity to examine it before, find it deserves your consideration and support, be kind enough to send us the subscription price, two dollars, at your earliest convenience. If for *any* reason you are not disposed to become subscribers we beg you to return this number to our address with your name and Post Office address appended.

Original Matter.

Most of the original articles contained in this number are unusually interesting, and it is to be hoped they will not be passed over without a careful perusal. For many months the health of the Editor has been so infirm that he has not been able to write original papers for the pages of his Journal. This he regrets as he has many rare and interesting cases which he is anxious to report for the edification of his friends. He is sometimes, from severe indisposition, compelled to contemplate a period to his labors not far distant. The

thought that in the midst of his labors, and he trusts to some extent of usefulness, his communion with his professional brethren and co-operation with them in every good word and work must find an abrupt termination, is painful in the extreme. Professional brethren are constantly and successively falling at their post. Few reach a ripe old age in consequence of the arduousness of their cares and toils, and why should he expect to live forever? May the writer and reader so live and act that we may hear the echos of the cheering plaudit of "well done good and faithful servant."

HOWARD'S INFIRMARY.—Perhaps it may not be improper to say to our friends that our Infirmary, designed for the treatment of Chronic diseases of all kinds, particularly for those of a Surgical character, is in a prosperous condition. It is fully organized, and has been in successful operation for nearly one year. The advantages which this Institution possesses facilitate the treatment and expedite the cure of many very obstinate cases which can scarcely be managed in private practice. We invite the attention of physicians to it, and shall be flattered should they commend suitable cases to our care.

PROFESSOR HAMILTON'S FRACTURE TABLES.—We take pleasure in calling the attention of the profession to the fracture tables of Professor Hamilton. Although published in an unassuming form they are a rare and choice contribution to our Surgical statistics. In the following letter addressed to Dr. Reese, editor of the New York Medical Gazette, the reader will see the author's scope and design

BUFFALO, July 20, 1853.

"MY DEAR DOCTOR—I send you by this mail a copy of the second edition of my "Fracture Tables," just published. They are much enlarged by the addition of a supplement.

"Everybody is looking just now to find some means of arresting prosecutions against surgeons for alleged mal-practice. Dr. Crosby seeks to accomplish this by refusing to undertake the treatment of any case of fracture until the patient or his guardian has signed a bond that he will not prosecute. Several eminent jurists inform me that such a bond is of no value or force in this State—that a surgeon cannot be released from his responsibilities. The Massachusetts

Medical Society have made a report upon the subject. Dr. Gross, of Louisville, writes me that the mania for prosecutions has reached Kentucky. Indeed I have received communications from various sources in more than one-half the States in the Union which constantly and uniformly speak of the frequency of these suits, and of their unjustness. I have thus far escaped, and so also have one or two other surgeons of Western New York; but it is safe to say that not more than one out of every ten who practice Surgery to any considerable extent, but have been compelled to defend suits of this kind.

It seems to me that the cause of all this is to be found in the fact that surgeons themselves have believed, and taught, and testified, that in a large majority of cases, broken limbs may be made perfect, while the fact is not so! On the contrary, in a very large majority of cases the limbs have been and will, I fear, of necessity, continue to be left imperfect after fractures. This is what my Tables have at length *established*. In them you see not the practice of empirics, but the practice only of the best surgeons. In not a single instance has a case been admitted which was treated by an irregular. Many of the cases are my own. Many of them were treated in the New York City hospitals; some in foreign hospitals. In the examination of these cases I have used great care. I have handled and measured them all myself. The measurements were made always in the presence of medical gentlemen, and I have noted carefully every circumstance, even to the name and standing of the surgeon, and also the treatment. In the tables, however, the names of the surgeons has for reasons which you will readily understand, been always omitted.

I believe I have had no selfish motive in the labor which I have thus accomplished. It has cost me much time and some money, but in this cause I have long been accustomed to spend both freely. I have testified for my brethren in nearly every county in Western New York once or more, and I have given my testimony under commission nearly as many times more for every state around me. I believe, therefore, no one will charge me with a wish to speculate in offering this book; yet I say frankly I hope it will be sold, not for my own sake, but for my fellow's sake. Yours sincerely.

FRANK H. HAMILTON."

The profession is indebted to our friend Dr. Hamilton for his patience and industry in getting up these tables. They will be of in-

valuable service to those who are for sinister purposes prosecuted for mal-practice in bone Surgery.

The price is 37½ cents for a single copy, or 25 cents each for four or more copies—to be had of Phinney & Co., of Buffalo.

Professional Changes.

The present year has been marked by very numerous changes in the faculties of Medical Colleges all over the country, several of which we have heretofore chronicled. By the announcement of the New York Medical College in another column, it will be seen that Professor Whitaker has resigned the chair of Anatomy; Professor Peaslee has been transferred to that department; and Dr. E. H. Parker, of Concord, editor of the N. H. Journal of Medicine, has been appointed to the chair of Physiology, &c., in this school. These are both good appointments, and ought to strengthen the claims of the Faculty on the profession and the public.

In the Ohio Medical College, Professors Locke, Baxley, Cobb and Rives, having resigned, the Faculty was reorganized by the election of Dr. G. W. Bayless to the chair of Anatomy; Dr. Asbury Evans to the chair of Surgery; Dr. N. T. Marshall to the chair of Obstetrics; Dr. S. G. Armor to the chair of Pathology and Physiology; Dr. Charles W. Wright to the chair of Chemistry, and Dr. Thomas Wood to the chair of Surgical and Practical Anatomy. Dr. H. E. Foote has been appointed to the chair of Chemistry in the Miami Medical College of Cincinnati.

EDITOR'S CORRESPONDENCE.

DR. HOWARD: I submit, for publication in the Ohio Medical and Surgical Journal, the following condensed report of the testimony, so far as it relates to legal medicine, given in a case the trial of which has just concluded in the District Court now in session in this place, Judge Belden presiding.

The defendant, Geo. P. Smith, a man of mature years, but below the medium stature, was charged, in a bill of indictment, with the crime of rape, or an assault with intent to commit rape, upon the person of Sarah H. Walker, aged eleven years and some months,

on the 8th day of May last; and the following testimony was introduced to establish the truth of the allegation.

The prosecuting witness, Sarah, being sworn, states, that on the 8th day of last May, about 4 o'clock P. M., she was sent, in company with her younger sister Louisa, aged 10 years, to No. 13, in the Tremont House, distant about three or four minutes walk from her residence in the town of Massillon, O., with a handkerchief belonging to said Smith, which her mother had previously washed and ironed—that on entering said room, they delivered the handkerchief to Smith, whom they found alone—that he asked them to sit down, and enquired if they would not like to be mesmerized—that they replied that they did not know any thing about it; thereupon he gave each a piece of metal to hold in the hand, and locking the door, directed them to look steadily at the objects they held until their eyes grew dim, when they would go to sleep—that they did so look for a few minutes, when they went to sleep—that Smith then took Sarah, the elder, up from her chair, led her to and laid her on the bed, raised her clothing from the lower part of her person and laid it on her breast—that he then unbuttoned his pantaloons, exposed his private parts and consummated the act of Congress by the actual entry of her private parts—that before he entered her, he raised her legs, and separated them so as to put them one on each side of his body—that he remained about five minutes in this position—that he then withdrew from her and took her from the bed, tried some trifling experiments in mesmerising with her and her sister—then unlocked the door and let them go—that they went directly home, where they found their father, little brothers and mother, to the last of whom she (Sarah) disclosed what the defendant Smith had done to her, and complained that her drawers were wet, and also that she was sore—that her mother examined her clothing, took off her drawers and hung them on a line, then went out and called Mrs. Ross to come and see them, and that she and Mrs. Ross went out and came back with Mr. Terry and Mr. Keith—that before very long, Dr. Hurxthal and Dr. Schutzer came and examined her and the drawers she had on when she was in the room with the defendant. On being cross-examined, she stated that her eyes were closed during all the time she was in the bed—that she could have resisted if she chose—

that she was not under the control of his will—that she could have taken her limbs from the position in which he placed them, or made outcry ; but that she did not know what to do. She further stated that she remained in the room about ten minutes after she came from the bed—that she laughed while there, on Smith's telling her it was not her sister she was sitting on the bed with when her eyes were opened, &c. &c.

Margaret Walker, the mother of the girls Sarah and Louisa, being sworn, corroborates the former as to her being sent to the Tremont house, No. 13, in company with her sister, at the time specified, by her ; and states that they were gone about twenty minutes from home when they returned, and Sarah related the circumstances precisely as they are detailed in the preceding testimony before the jury—that she examined the clothing and person of Sarah—that the drawers were wet underneath the private parts, and the latter swelled and red—that the drawers were taken off and hung on a line—that in a few minutes several individuals were made acquainted with the facts by personal inspection, and that amongst these were Drs. Hurxthal and Schutzer. She further states that the girl was sick for a week subsequent to this time ; complained of pain on making water—that it felt like a knife cutting her ; and had pain in the back.

Louisa Walker corroborates her sister Sarah in all the particulars up to the time of the eyes of both being closed—heard him unbutton his pantaloons (as did her sister,) “heard the bed *squeak*,” &c.

Mrs. Ross corroborates the mother as to the drawers being wet, and complaints of the girl Sarah.

Dr. F. T. Hurxthal, being sworn, testifies that about dark on the evening of the 8th day of May last, he was called upon to go to the house of Mr. Walker, and make examination in reference to an alleged assault upon Sarah Walker—that he went there accompanied by Dr. J. Schutzer.

That on their arrival, they were requested to examine a pair of drawers which were presented and had the appearance of such as would be worn by a girl of Sarah's size and age. Found on the lower and back part of the seat of this article a spot of considerable size, still very damp, and which yielded the odor of semen. The

stain on the drawers is such as would be left by semen. We made the examination by candle-light. Dr. Schutzer laid the girl down on a bed—raised and separated the legs; and I examined the private parts of the girl. Saw no marks of violence—no blood or evacuation, and no swelling. On separating the labia, discovered on the left internal surface, increased vascularity, as I thought; that is, I regarded the color a deeper red than natural—a purplish red—attempted the introduction of the little finger, but the complaint of pain was so great that I desisted—did not enter the finger more than half an inch. Subjected the spot on the drawers to no other examination or test than that of smell, and appearance to the eye by candle-light. Can say with certainty that the condition of the drawers indicated semen. Should regard it impossible for an adult to have entered the girl. Semen has a peculiar odor—cannot say what this odor is.

Dr. Schutzer. I examined the girl with Dr. Hurxthal—saw nothing unusual—nothing wrong. There may have been increased redness. She complained of no external injury. Examined the drawers—saw a stain on one side—it was not perfectly dry to my sense of feeling. I thought it had the odor of semen. If this little girl had never menstruated, could not have made the mark or the odor. I have since thought we did not do the subject justice in our examination. If the hymen had been ruptured, there would have been some evidence of it.

On the defence was called out the following:

Dr. L. M. Whiting being sworn, says, that he regards the microscope as the only sure test for fluids suspected of being seminal, and that by the exhibition of spermatozoa; that in the absence of these animalculæ, we cannot declare with certainty that any fluid or discharge is seminal—that *odor* is not a test of semen—that there are certain chemical manipulations which might render the existence of semen very probable; but in the present state of science, and where grave consequences depend upon the establishment of this fact, the actual presence of spermatozoa should be insisted upon—that girls of all ages are liable to discharges from the urino-genital apparatus, varying in color, consistence and odor, with the variations in pathology of the parts concerned in their production—that the spot upon the drawers now before the court, for aught he can see, might be

produced by many other agencies than the deposition of semen with its associated secretions—that it may be made by seminal discharge. That a man having at every advantage a young female, and making any vigorous efforts to accomplish a design to commit a rape upon her, she making no resistance, could hardly leave her person without some indubitable evidence of violence—that girls of tender years are tenderly disposed upon being subjected to examinations per vaginam, and complaint of pain is an almost constant concomitant. Cannot state positively how long an ordinary seminal emission would remain wet—this would depend on the condition of the atmosphere, and the perfection of exposure—from half an hour to an hour should think time enough to desiccate it when hung on a line and spread on muslin. Should think evidence of injury to person from violence of the sort here contemplated, as contusion, &c., would be more likely to exhibit itself some hours subsequent to its infliction than immediately after.

Dr. T. C. Shreve, sworn, says he considers the microscope the only sure test of seminal discharge—that this is the doctrine of the authorities: quoted Orfila to the effect, that the saliva, under certain circumstances gives off “the true spermatic odor:”—that he does not regard the sense of smell as a reliable means of detecting semen—thinks the odor which is spoken of as *peculiar* is transient, and the evidence presented by it would disappear in a short time—that the seminal discharge dries rapidly when exposed to the air—that the appliance of force to any great extent, by a man standing in such relations to a female child as have been here described, for the purpose of accomplishing an intent to commit a rape upon her, must have been followed by the evidence of personal injury on the female.

Drs. H. M. McAbee, A. W. Whiting, and L. Lamborn were called—all of whom corroborated the testimony of the two last named medical witnesses.

Mrs. Walker was recalled, and testified that her daughter Sarah had never menstruated, and never before or since the day of her visiting the defendants room have her clothes exhibited any such appearance as that upon her drawers now in court—that she has ever been well.

Dr. L. M. Whiting was recalled and enquired of as to effects of mesmerism. In reply, he states that although he has seen many experiments, and read much in relation to the influence exerted in this agency, he does not yet understand well enough the laws of its action to speak definitely in regard to it: but, from his own observation, and reading what may be called authorities on the subject, he would consider the accomplishment of perfect controls over two subjects at the first sitting, in the space of a very few minutes, as very remarkable. Cannot say what time is requisite for a mesmerizer to get control of the will of a subject.

REMARKS.—This case presents several prominent points of interest, amongst which are, the youth of the prosecuting witness, the complication of the element of *mesmerism* with it—and the nature of the testimony introduced to corroborate the statements of her upon whom the outrage is claimed to have been perpetrated. A full report of the trial is necessary to show the fact that circumstances exist of a nature to cast at least a shadow of suspicion over the integrity of some of the principal witnesses for the State, and also that the defendant was surrounded by abundant means for the indulgence of passion, without subjecting himself to the commission of a heinous offence against the laws. With the knowledge of these facts, it cannot cease to excite “especial wonder” that a man having a wife and children, and intelligence, should seriously attempt the gratification of inordinate desire upon a child: and that wonder should naturally grow into astonishment when we learn that, entertaining this purpose with every facility for its accomplishment, he should leave no decided traces of violence upon the person of the assaulted. Again, it becomes a matter of great moment to know how far the courts will go in receiving the testimony of persons who, by their own confessions, are, at the time of occurrences in regard to which they testify, in an unnatural state;—that is to say: Will our courts admit testimony going to establish important facts, when the knowledge of the witness is obtained while the functions of organs, and appuratuses by the use of which such knowledge is usually obtained, are either partially or entirely suspended?

In relation to the corroborative testimony in this case, it would seem that, without the presence of the “spot” upon the clothing—

the story of the girl would stand entirely alone. Hence it becomes a matter of profound gravity to determine as certainly as the nature of the case will admit, what was the material deposited there, and the propriety of calling in the aid of science is apparent. Equally clear does it appear that no equivocal means should be used in an investigation where consequences so important are depending as the reputation, the personal liberty, the *all*, in short, of the citizen. This being the case, it is to be hoped no member of the medical profession will permit, under any circumstances, the escape from his lips of an opinion in such matters, which he has not "the book" to swear by, that it is absolutely correct: for the contrary course *may* tend immensely to prejudice community, and perchance, bring down upon an innocent head the lightnings of public indignation.

L. M. W.

Canton, Aug. 6th, 1853.

August 7th. The jury, after being out during the night and half of this day, have returned a verdict of "guilty of assault with intent to commit a rape."

August 9. On motion, a new trial has been granted by the Judge.

MEDICAL NEWS.

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Medical Examiner

MARIETTA, OHIO, *Aug. 12, 1853.*

Dear Sir—I received upon day before yesterday, the number completing the fifth volume of the Ohio Medical and Surgical Journal.

I have read it with both pleasure and profit. And do hope, and trust, that your valuable Journal will be pecuniarily well sustained. As an evidence of my sincerity in this matter, you will please find two dollars enclosed, to pay my subscription for the next year.

And as I am now writing, please let me trouble you for a few moments with the history of a case that I have now under treatment. I do this hoping that you will answer this by letter, and make me any suggestion in relation to the future treatment of the case that may occur to your mind.

The man was attacked with acute Pleuritis of the left side, on the 20th day of March last. And having been inefficiently treated, the disease continued in a chronic form until it terminated in abscess of the Pleura, and an effusion of pus into its cavity.

This was the condition of the patient, when he put himself under my care. I gave him mercurials with the view of arousing the absorbents; but at the expiration of ten days, respiration became so difficult, and the action of the heart so much impeded, from displacement and compression, that I resorted to the operation of Paracentesis thoracis, which I performed on the 24th day of July upon the plan laid down by Druitt. The operation discharging about twelve pints of a greenish yellow pus; and during the subsequent week about one additional gallon.

Since which time his side has been discharging upon an average from a half pint to a pint, per day. For a few days after the operation, he had a slight hectic fever, which entirely disappeared under the use of a generous diet, and mercurial alteratives, which have been continued up to within the past three or four days. At which time I substituted the Iodide of Potassium, in conjunction with Sarsaparilla. One of the singular features in the case is the position of the heart, the apex of which, was before the operation, and is still beating in the right mammary region, just below the nipple.

I thought that after the fluid was discharged, the heart would resume its natural position, But this is not the case. Can there be

adhesion between the Pericardium and Mediastinum? Or can it be held in this position by fibrous bands, extending from the anterior to the posterior part of the Pleura. This position does not appear to obstruct the circulation in the least. Does it not form rather a short curve or angle in the Aorta, which we might reasonably expect to impede, and enfeeble the circulation?

May I expect to see my patient recover with the heart in this position? Please answer me by letter, and pour into my limited mind all the light you can upon the case. My patient to all appearance is recovering.

Respectfully,

P. COOKE.

DUTY OF MEDICAL MEN.—Dr. Todd, in his farewell address, on resigning his professorship, made the following remarks:—

“It appears to me, that when a man proposes to devote himself to the practice of an honorable profession, he has a twofold duty to perform; first, to fit himself to the utmost of his ability for the practical duties of that profession, and, secondly, having done so, it is incumbent on him to divest himself, as far as possible, of every engagement which may interfere with his bending his thoughts and attention to the various anxious, difficult, and often perplexing questions which are continually arising in the course of his professional practice. Every member of a liberal profession should keep it constantly in view that he exercises his calling not simply for his own personal benefit, but for the public good, and for the good of his profession at large. So every practising physician or surgeon, whether the sphere of his labor be within wide or narrow limits, should bear in mind that in successful application of his art, by fair, honorable, and truthful means, is involved the repute and estimation in which his profession is held by the public at large. Let each of us act under the feeling, that to himself specially is committed the keeping of the honorable character and the scientific credit of our common profession, and he will have the strongest motives, not only to eschew everything that savors of charlatanical pretence, but to seek for and insure the highest means of moral and intellectual culture.—*Med. Gaz.*

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No. 2.

PART FIRST.

ORIGINAL COMMUNICATIONS.

ART. I.—*Albumen in Urine—Its Value in Diagnosis.* By CHAS. A.
LEE, M. D., &c.

IN A LETTER TO THE EDITOR.

MY DEAR DR.—It has become very common, of late, with certain practitioners, if they detect the presence of albumen in the urine, by heat or nitric acid, to pronounce at once an unfavorable diagnosis, on the ground that the patient is laboring under Albuminuria, or Bright's disease of the kidney. Many persons have been unnecessarily alarmed, and their disease, whatever it may have been, greatly exasperated, by the influence which such an opinion has had upon the mind, and through that upon the disease. While I have no doubt that the danger of that disease, (Albuminuria,) has been greatly exaggerated, I have still less, that a false diagnosis is often made, and that patients are told that they labor under this disease, when there is no good foundation for such belief. There are many circumstances under which albumen exists in the urine, independent of every structural change in the urinary organs, and these circumstances should be more generally known. Simon tells us that albumen is often found in the urine of persons in *perfect health*, and though this statement, perhaps, needs confirmation, by more extensive experiments than have, as yet, been made on healthy urine,

there is no good reason to doubt its correctness. Observation has been hitherto chiefly limited to diseased urine, or urine secreted during some other disease, and I think there is no good reason to doubt that albumen will yet be found to be not an unfrequent ingredient in the urine of perfect health. At any rate, we know that the urine of pregnant females often contains albumen, especially in first pregnancies, and in cases of twins, owing probably to unusual congestion, produced by the pressure of the impregnated uterus, and temporary congestion from any cause, even short of disease, will be likely to produce the same result.

Since I have made it a rule to examine the urine in all diseases, I have often met with albumen in it in acute diseases generally, as well as some chronic ones, independent of any disease of the kidneys themselves, and I believe it will yet be found, that in a majority of acute diseases, albumen, in greater or less quantity, will be found during some period of them; to febrile and inflammatory affections, these periods will be about the commencement of the febrile excitement, and just after the crisis, when convalescence is about to be established. This is well observed in all the exanthematous fevers, especially measles, scarlatina and small-pox, and the presence of albumen in these cases may actually be regarded as a favorable symptom. It neither indicates the presence of organic disease in the urinary organs nor any tendency thereto. It is the result of a series of changes, which seem essential to a restoration to health, and is of no more consequence than the desquamation and exfoliation of the cuticle. I do not mean to say that albumen is always present in these diseases in their early stages, but, as a general rule, it will be found during the desquamative stage. Martin Solon says, "in twenty-two out of twenty-three cases," according to his observation; and Simon says it is "commonly" found. It may not last for more than two or three days, for the most part, it does not, and will generally be found to be associated with a considerable amount of kidney epithelium, but no fibrinous casts. The quantity of urine secreted will not vary far from the normal standard, and in other respects it will be nearly natural. It is possible that, in some epidemics of scarlatina, as stated by Chrisitison, albumen may not be found, as a general rule, in the urine, just as we find some one particular feature or symptom absent, but these varying results may, in some cases, be owing to want of care in making the observation and experiments. The examination of the urine should be made daily, or several times a day,

and then the treatment may have considerable influence in preventing its presence in the urine, as the warm bath, and other revulsive means, which determine the blood to the surface, and thus relieve renal and other internal congestions, and then it should be recollected that the presence of albumen in the urine is often limited to a short time, as one day, or a few hours, and unless we daily examine it, we shall be liable to be deceived. These remarks will apply also to small-pox and measles. I have observed, also, and the same observation has often been made by others, that during the acute stage of *erysipelas* the urine will often be found highly albuminous, as well as during the stage of desquamation, when it may last for several days, and contain an abundance of epithelium scales. This state of the urine is more common, it is true, in idiopathic *erysipelas*, where the disease involves a considerable extent of surface, but it will probably be met with more or less frequently in every form; but then the urine must be frequently examined. So too, during the stage of reaction in *cholera*, the urine will generally be more or less coagulable, at the same time the urine will be absent, or in small quantity, while there will be present biliary coloring matter, and epithelium scales. The presence of renal epithelium shows the occurrence of desquamation, and probably, as Dr. Bigbie has suggested, the passage of the albumen from the blood is closely associated with, or depends on this process, and that too, independent of renal congestion. But this yet remains to be proved. It must be admitted, however, that we often meet with albumen in the urine in scarlatina, where there is no other evidence of renal congestion, as lumbar pain or uneasiness, or diminished urinary secretion. In the dropsy that follows scarlet fever, we find albumen in the urine in a large majority of cases, while, at the same time, the urine is scanty in quantity, sometimes tinged with blood, and usually charged with exudative corpuscles, epithelium, and fibrinous casts of the small tubes. Here there, can be no reasonable doubt of the presence of renal congestion, for we have, in connection with the diminished secretion, pain and a sense of weight in the lumbar region, with occasional vomiting, and whether organic renal disease may not grow out of such congestion when severe or, long continued, is a question to be determined by future observations.

In variola, in the few cases in which the urine has been tested, albumen has occasionally been discovered in the early stage; also, in the suppurative or critical stage, but more frequently in the stage

of desquamation, and not unfrequently tinged with blood, with amorphous or crystalline urates and epithelium.

It is now a well known fact, that albumen often exists in the urine in *pneumonia*, about the period of the resolution of the disease. Simon observed it in twenty-two out of twenty-four cases, at this period, and sometimes during the inflammatory stage. I believe it is, however, generally connected with the absorption of the pulmonary exudation, and it may perhaps be, as Schonlein has suggested, that the kidneys act as the chief emunctory for the escape of such matters from the blood, which are chiefly albuminous, although the urine also abounds with lithates in such cases. Albumen has also been detected in the urine in *pericarditis*, *endocarditis*, *pleurisy*, *carditis*, *peritonitis*, &c., and after the application of blisters.

In regard to chronic diseases, there is good reason to believe that in most organic and structural diseases of the kidneys, the urine will be albuminous, though such is not always the case, even in Bright's disease, at certain periods. It may, however, be stated, as a general rule, that in a majority of organic diseases, whether of the abdominal or pelvic viscera, the urine will, at times, coagulate by heat or acid. I have known this happen so often in a hepatitis (recent,) carcinoma of the liver, and enlargements of the spleen, that I have come to regard it as a common occurrence. In some cases where albuminous urine is associated with dropsy, as ascites, it is possible that the urine may become albuminous from the influence of stimulating, and irritant diuretics, as squill, turpentine, juniper, cantharides, &c. In all cardiac or other affections, calculated to produce congestion of the portal system, and a reflux of blood through the mesenteric and renal veins, we may expect to find more or less albumen, at times, in the urinary secretion, and the same remark will apply to pulmonary diseases, as phthisis, pneumonia. The influence of stimulating diuretics in causing coagulable urine has long been known, but it is too often lost sight of, in treating those affections in which albuminous urine is apt to occur, independent of their action, as Bright's disease; any person can easily test this point by taking a few doses of cantharides, and then test the urine; or juniper, which also tends to produce temporary renal congestion, will produce the same effect. So, also, will blisters, when they cause strangury, and sometimes when they do not. In dyspeptic cases too, the urine will often be found albuminous, and in temporary fits of indigestion produced by eating pastry, hot rolls,

&c., the same happens. Recent observations in the Royal Infirmary of Edinburgh prove that albumen is found in the urine in a majority of cases of Typhus fever, about the sixteenth day of the disease, and continuing four or five days; also, in a vast majority of cutaneous affections, where a large portion of the cutaneous surface is affected.

These remarks will suffice to show that we are, as yet, ignorant, in a great measure, in regard to the diagnostic value of this sign. It is significant doubtless of something, but what that something may be, we cannot always determine. We generally connect it, and no doubt truly, with renal congestion, temporary or permanent; but, whether that congestion be associated with structural changes, we have no means of deciding. That it often is, we know, and we know with the same certainty that it often is not—whence then the propriety, in chronic cases, in basing an unfavorable prognosis on this alone? We do not proceed thus in other cases, and I see no good reason why we should do so in this. The fact is that renal pathology is yet in its infancy; it is only within a few years that any considerable attention has been paid to the constitution of the urine, or that chemical and microscopic science have contributed their aid to elucidate renal diseases. I have no doubt that many anomalous cases of disease, whose pathology has hitherto been obscure, and unknown, will yet be found to have their origin in the retention of *urea* in the blood, and this is only to be ascertained by a careful and repeated analysis of the urine, with due regard to all the circumstances which modify the condition of this fluid. I have recently treated some cases of obstinate head-ache, on this hypothesis, with diuretics, and with complete success; colchicum and turpentine, with hydriodate of potash, increase the quantity of lithates and urea in the urine, and thus relieve the system of a *materies morbi*, which is productive of a great number of anomalous and painful symptoms, including, probably, rheumatism and gout.

But I did not sit down to write you an essay or monograph, but merely to throw out some hints in regard to albuminous urine, and to show that it is not so grave a sign as some pathologists are disposed to regard it, and much remains to be learned, and many more observations to be made before we shall be able to understand its true diagnostic value.

Truly yours,

CHAS. A. LEE.

ART. II.—*Case of Placenta Previa.* By J. INGRAM, M. D.,
Savannah, Ohio.

Mrs. A. W., æt 30, plethoric, robust, nervosanguineous temperament, accustomed to much exercise, generally healthy, pregnant fourth time. During fourth month of gestation she rode several miles very rapidly on horseback, and soon returning, lifted a heavy stove for some distance; while engaged in this latter feat, she "felt something give way," as she expressed it. On subsequent night uterine hæmorrhage came on, which alarmed herself and friends. On visiting her, soon after the commencement of this occurrence, she was greatly alarmed, pale, fainting, hæmorrhage still continuing, a sharp pain in lower portion of abdomen, much aggravated on motion. Ordered utmost quiet and rest, in recumbent position, cold to abdomen and vagina; also, the internal use of Sulph. Morph., and acct. plumbi. Very soon the hæmorrhage was arrested, and patient began to revive bodily and mentally. Continued as well as common for about a month, when, without any apparent exciting cause, a repetition of the same symptoms took place, perhaps worse than the first attack; treatment, somewhat similar, and with nearly like results, only a greater or less degree of pain, and slight hæmorrhage occasionally occurred during the next three to four weeks. During all this time the uterus was high up, and mouth very little dilated. About the close of sixth month, hæmorrhage became continuous, though not severe; also, a gnawing, steady pain, apparently situated in the os uteri.

On examination, per vaginam, the os uteri was found considerably dilated, and the placenta firmly implanted over it. At this stage, the hæmorrhage became alarming, and the only alternative, immediate delivery, to save the life of my patient, and, to accomplish which, it was resolved, as soon as the mouth of the uterus would permit, to introduce the hand, turn the fœtus and deliver. On introducing the hand, the placenta was found firmly adherent to the parietes of the uterus at one or two points. A separation being at length effected, although attended with much difficulty, loss of important time, and also considerable blood. By this time, regular labor pains came on, and being aided by a *full* dose of *Ol. Ergotæ*, the expulsion

of fortus and placenta was soon accomplished. The uterus contracted well, consequently the hæmorrhage was soon arrested. Every thing seemed to promise fair for speedy convalescence, until the fifth day, when, on attempting, contrary to directions, to leave her bed and perform some work, secondary hæmorrhage came on, and for some time was very violent. On visiting the patient now, (the distance being nearly five miles,) she was in an alarming state of syncope, the pabulum of life apparently fast ebbing to a close. Stimulants were immediately administered—Ether, wine, and Ol. Ergotæ internally, and cold appliances externally, were steadily and faithfully used for several hours, when the patient began to revive, and the hæmorrhage to abate. Strict rest in the recumbent posture being enjoined, Sulph. Morph. and tannin occasionally given; also, the free use of Port Wine, given with the view of compensating, in some measure, for the vast drain on the system, as well as for arresting that drain, by its astringency and restoring and maintaining animation by its stimulant effects. Under this treatment, variously modified to meet the circumstances of the case, the patient got well and is now, (two months since,) in her usual vigorous health.

ART. III.—*Epidemic Erysipelas, Syn. Erysipelatous Fever, Malignant Erysipelatous Fever, Black Tongue Fever, &c.* By LINDLEY SCHOOLEY, M. D., of Belmont county, Ohio.

This disease frequently commences with local pain, of an acute, lancinating character, some succeeded by increased heat, soreness upon pressure, swelling and redness. Dark lines extend from the inflamed part along the course of the absorbents; purple spots appear on the surface, rapidly terminating in gangrene. Accompanying these local symptoms, constitutional disturbance of a grave character, is always present. A feeling of lassitude, pain in the head, back and limbs, nausea and vomiting, soreness of the throat, offensive breath, coldness of the extremities, rigors, &c. This state of depression may continue an indefinite period; but usually, in from four to twenty-four hours, it is succeeded by reaction, characterized by restlessness, increased pain in the head, back and limbs, full, strong and frequent pulse, great thirst, extreme heat, and dryness of the skin, giving the impression to the hand of burning, pungent heat.

The tongue, which had previously been covered with a white or yellow fur, the papillæ red, and projecting through the coat, now becomes dry and dark, and in many cases even black. The urine is scanty and high colored, and generally voided with difficulty. The eyes are dry and injected, the patient soon becomes delirious, or sinks into a stupor, from which it is difficult, and in many cases, impossible to arouse him. In other cases, the constitutional disturbance precedes the local inflammation, two, three, or even four days. In such instances the erysipelas appears first on the face, or genital organs, spreading rapidly, involving not only the skin and sub-cutaneous areolar tissue, but parts beneath. The skin becomes smooth, tense and shining, large vesicles form over the inflamed part, burst and discharge an acid fluid, excoriating the parts with which it comes in contact. The pain is intense, and increased to an intolerable degree by pressure. Like the preceding variety, if the tension is not relieved it terminates early in gangrene and sloughing, with all the general symptoms attendant on this condition of the system. When the tongue is the seat of the local inflammation, the same general symptoms that attend the other varieties of attack are present in an aggravated form; the first indications of this seat of the disease are stiffness of the tongue, soreness of the throat, difficult and painful deglutition, &c., succeeded by pain and rapid swelling, the latter the most urgent. I will state a case that will serve to illustrate the rapidity with which the disease progresses in attacks of this kind. The subject, a man about 45 years of age, of temperate habits, and good constitution, was attacked in the morning, with pain in the tongue, with, or rather succeeded by all the symptoms of erysipelas, as it was then prevailing; no remedies were prescribed until nine o'clock in the evening; his condition at this time was as follows: the pulse 130 per minute, and small, skin cool, and clammy, breathing difficult and painful, from the swollen condition of the tongue, which was protruded, and of a dark purple color, stupor, &c.

Occasionally there is no eruption on the surface, and in such cases the mucous membrane of the mouth, fauces, stomach and bowels is very liable to suffer from the inflammatory action. The lungs, pleura, brain, or its membranes, are occasionally the seat of attacks, which rapidly terminate in death, unless metastasis of the erysipelas occurs to some less important part.

Puerperal women are peculiarly obnoxious to peritonitis during the prevalence of this epidemic. In the early stage, it is extremely difficult, and perhaps, impossible, to distinguish this from certain other forms of disease. Scarlet fever is most liable to be confounded with it; indeed, I know of no symptom, or set of symptoms, by which we can distinguish one disease from the other. The soreness of the throat, heat and redness of the skin, elevation and redness of the papillæ, frequency of the pulse, nausea and vomiting, &c., are all equally prominent features in the early stage of certain forms of the two diseases, yet, with all these features of resemblance, there are indefinable peculiarities, or, a physiognomy, that will enable an observer to make a correct diagnosis in a majority of cases. After the disease has become fairly established, and, in those cases in which the local symptoms precede, or accompany the constitutional disturbance, the diagnosis is not generally difficult.

From the extreme fatality that has attended this disease, as it has prevailed in various sections of our country, we shall necessarily be cautious in our prognosis. In persons of previous good health, in the prime of life, we may reasonably anticipate a favorable termination. Persons of intemperate habits very rarely recover; they also appear to be more susceptible to the epidemic influence. The character, of the epidemic, the importance of the organ involved, together with the age, habits and predispositions of the patient, will have much to do in controlling our judgment in a given case. The duration of the disease is various, terminating in death as early as the third or fourth day, and in other instances, running a course of from four to six weeks. The usual period may be stated to be from three to four weeks.

The cause of this disease is not well understood. Some believe it to be contagious, whilst others entertain the view that it is a contagious epidemic, and still a third class, deny its contagiousness altogether, maintaining that it is purely epidemic. I believe the general or predisposing cause to be some atmospheric peculiarity, or epidemic influence, sufficient in many instances to induce the disease, but requiring an additional or exciting cause, in others, to develop it. Of this class of agents are wounds, exposure to cold, loss of sleep, improprieties in diet, fatigue, fear, grief, or any depressing agency.

The frequency with which puerperal women are attacked by a violent and rapidly fatal form of peritonitis, in localities visited by this epidemic has led many to adopt the view that the diseases are identical in character, differing only in the seat of the inflammation. This view is most probably correct. It has also been maintained on the same ground, that the disease is contagious, and communicated by the accoucheur. The following circumstances came under my observation, and, as they were believed, at the time, to be sufficient to establish the identity of erysipelas and peritonitis, and also their contagiousness, I will briefly relate them. A lady, residing several miles from the neighborhood in which epidemic erysipelas prevailed, was attacked soon after confinement, with peritonitis, of which she died. Her attendant, during parturition, had not seen a case of the prevailing epidemic. Two of the nurses of this lady, being confined almost constantly to the sick room, were attacked with erysipelas, whilst persons visiting and remaining but a short time in the room, escaped altogether. The inferences from these facts were, that the lady first affected suffered from erysipelas of a serous membrane, and that the nurses contracted the disease from her. We have seen, however, that this, like other epidemics, will operate more certainly where some other depressing influence is conjoined.

Is it more than reasonable to suppose that the prostration attendant upon parturition, should be sufficient to induce disease, the epidemic influence determining its character? In the case of the nurses, we have the depressing influences, inseparably attendant upon confinement to the sick room, loss of sleep, anxiety of mind, &c., circumstances best calculated to render the hitherto latent epidemic influence operative. It is true, that wounds, received in the post-mortum examination of persons who have died of this disease, have been attacked, early, by local erysipelas, succeeded by the usual train of symptoms. There are few agents more decidedly depressing, than wounds of this kind, and consequently, better calculated to bring the system under the influence of the epidemic.

TREATMENT.—If the pulse is full and strong, and the febrile symptoms high, bleeding is indispensable, and should be carried at once to the extent of moderating the force of the circulation, recollecting, however, that the local inflammation can not be cured by this remedy,

without carrying it to a dangerous extent. It is particularly demanded where a vital organ is involved in inflammation. An emetocathartic, of calomel and ipecac, should succeed the bleeding, especially in cases complicated by biliary derangement. An occasional alterative dose of calomel, followed by some mild purgative, will be found useful in the early stage of the disease, studiously avoiding salivation, which increases the constitutional irritation, without controlling the disease. Where anodynes are admissible, Dover's powder, or opium and ipecac will be found highly beneficial, allaying pain, and inducing sleep, at the same time determining to the surface; but unfortunately, there are but few cases in which this class of remedies can, with propriety, be administered, in consequence of the disposition to congestion of the brain. I have found cold, or tepid sponging answer a very important indication, by abating nervous irritation, moderating the heat of the surface and inducing sleep. Many practitioners have been deterred from the use of cold, from fear of metastasis, but I am confident, that if judiciously applied, it is not only a safe but highly efficacious remedy, accomplishing as much in this disease as it will in scarlet fever. When typhoid symptoms supervene, which is apt to be early in the course of the disease, quinine, ammonia, camphor and, in extreme cases, the more powerful stimulants should be resorted to, for the purpose of sustaining the failing powers of the system. The principal local remedy is free incisions into the inflamed part, to relieve the engorgement and by the local depletion, the inflammatory action, which would otherwise terminate in mortification. The incisions succeeded by emollient poultices, or simple water dressings, will effect much toward relieving the patient, and subduing the disease. Blisters, nit. of silver, tinct. of iodine, together with a host of other remedies, have been recommended to prevent the erysipelas from spreading, but I have never found any benefit from their use, and have consequently abandoned them. During convalescence, large abscesses are apt to form in various parts of the body, endangering the life of the patient. Tonics, and a general sustaining regimen, will generally be found necessary, in conjunction with the treatment applicable to abscesses.

ART. IV.—*Pathology and Treatment of Searlatinal Dropsy.* By
FRANK BROOKS, M. D. Franklin County, Ohio.

This form of Dropsy is rather of frequent occurrence during the Epidemics of Scarlatina. It is more apt to follow mild cases than those of a more grave characters, often being the only condition that the Physician is called upon to treat during the prevalence of Scarlatina and owing to its fatal tendency, it is highly important that its Pathology should be understood, both with a view to its prevention, and cure.

Evidently, the pre-existing disease has much to do in the production of the one that follows.

The functions of the skin are much impaired during an attack of Scarlatina. In fact the secretions are almost entirely suspended for several days, then follows the stage of desquamation, which is looked upon as being an eliminating process.

Owing to the supplementary function of the kidneys they are taxed, beyond their normal action during the existence of Scarlet Fever, in ridding the system of those irritating substances, naturally excreted by the skin.

It is a fact well established, that undue exercise of an organ, if continued long, is a strong predisposing cause to disease, and many times, requires but a slight exciting cause for its development.

As the symptoms of Scarlet Fever subside, desquamation commences, the skin now begins to attend to its proper functions; the secretions are in general becoming natural again, and all appears to be going on well, but owing to some carelessness on the part of Parents, or nurses. Patients are exposed to cold, and consequently upon such exposure, the functions of the skin, are again suspended, the acid, and irritating compounds are again denied their proper channels of exit; and have to seek new ones, which have already been taxed by pre-existing disease, until they now refuse to aid the process.

Those parts of the kidneys which are endowed with the functions of separating the solid constituents of urine from the blood, such as urea, &c., become blocked up by an increased growth of Epithelium cells, beyond which they are capable of transmitting, and owing to this obstruction, there is congestion of those Intertubular Plexuses of

veins, ramifying upon the tubuli Uriniferi. The venous blood being thrown back upon the Malpighian bodies thus interfering with their function, a state of active congestion is the result, likewise, suspension, or, partial suspension of function. Then, there are not only materials retained in the blood, that ought to be given off by the skin; but a large amount of poisonous compounds retained in consequence of the renal disturbance. The blood, becomes altered both in quality, and quantity, its normal relations to the capillaries, and tissues in general, is to some extent destroyed, and a condition of blood existing which is, in the highest degree, favorable, to dropsical effusion.

There is an anæmic condition produced, but this alone would not be sufficient to produce Dropsy, it is necessary to have something in addition. If the urine is examined, there is found in it an excess of albumen, and a large decrease of urea, if the blood is examined, urea will be found in it in excess, and it is also found in the fluids effused.

There is in addition uric acid, and other highly irritating compounds retained in the circulation, the knowledge of which, I think, will help to explain some of the morbid Phenomena present.

It must be evident to any one, that, the blood is rendered unfit for the due performance of its proper functions.

Its proper healthy relations to the capillaries are measurably destroyed, and those chemico vital changes, which facilitate its circulation through that system of vessels, are partially suspended, in consequence of which, there is general capillary congestion and effusion of dropsical fluid. The effusion is probably, much favored by the retained urea, owing to its great exosmotic tendency.

TREATMENT.—The treatment must vary with the symptoms being based upon general principles; generally the earlier stages are characterized by fever, if this should be of an active and sthenic form general depletion by blood letting, cathartics &c., will be indicated.

Attention should be paid to the functions of the skin diaphoretics and, the warm bath, may in many cases be resorted to with benefit.

Diuretics are strongly indicated, but we should be cautious in the selection from this class of remedies; they should be those of a sedative, and unstimulating character. The kidneys should be looked

to, local remedies are required such as cupping, &c., for the purpose of relieving the congestion of those organs, thereby rendering diuretics admissible, and advantageous.

In some cases the symptoms are so urgent, and the state of the kidneys such, that we must rely principally upon cathartics.

Saline, or Hydrogogue cathartics should be employed, as the great object to be obtained, first, to relieve the distended blood vessels, so as to render them capable of absorption, thereby relieving the distended tissues and organs.

By way of prevention, parents, should be properly cautioned upon this subject; duly warned of the danger from exposure, want of proper clothing, diet &c., during convalescence from Scarlatina.

ART. V.—*A Singular Case.* By M. Y. BROCKET, M. D., of Tennessee.

I shall, in the present sheet, endeavor to present a brief outline of a curious case of disease that has fallen under my observation, and in the investigation and treatment of which I have been very much interested; and, although I must confess, that I have been baffled, yet I am not alone; there is not a disciple of Esculapius, who has witnessed the case, but has been compelled to acknowledge the same. The symptoms are strangely marked, wild and fantastic, and positively resisting every remedy that has been exhibited as yet, for its relief.

The patient is a man of yellow complexion, about 38 years old, of very fine, muscular strength, well proportioned in his physical stature, and possessing a constitution hitherto unimpaired, either by exposure or disease, (I however learned, that when a child, there was slight development of the scrofulous diathesis.)

He was attacked in the month of April, 1849, with a pain in the right arm, about the insertion of the coraco brachialis muscle, and which extended into the joint of the shoulder and under the scapula, increasing in severity for some three or four months, when an abscess formed at the original point of difficulty, and was allowed to discharge its contents by a spontaneous opening, and afterwards, in a short time, healed without trouble. He was then seized with a slight vertigo, and on attempting to descend a flight of steps, he fell and

was precipitated some twelve feet, and receiving the force of the fall upon the back and shoulder affected; he was then taken to his bed, which he was unable to leave for six weeks or more. He suffered greatly with pain in the back and arm, insomuch that, for a good portion of the time he was in bed he was unable to turn himself. A second abscess now formed upon the right breast, between the nipple and shoulder, as large as a goose egg, which took the course of the first as nearly as might be; a third formed upon the internal malleolus of the right foot, and terminated as the others. The lower extremities now began to swell, and he complained of great burning and intense pain in his feet, and soon they become very tender to pressure; and, although he had so far recovered from the fall as to walk before, he could now no longer do so, and was again confined to his bed; his right arm, also, become atrophied and nearly paralysed.

Shortly after he was confined to his bed again, he was seized with shivering, his extremities would appear cold, although he did not himself appear to recognize this coldness as much as the symptoms would have indicated. These paroxysms were at first very frequent, two or three in the course of the week, and confined to the right side, but they gradually increased in severity while they diminished in frequency, and from a slight shivering, with trifling spasmodic contraction of the muscles of the extremities, you would now see in a paroxysm terrible shaking, worse than the most violent ague, and the most fearful spasmodic action of the muscles of every part of the system successively.

As before said, these paroxysms were at first entirely confined to the right side of the body: they now display their wildest freaks in every portion—the head, chest, bowels, feet and hands, in a word, there is no part exempt from their influence.

Before attempting to give a minute description of a particular paroxysm, I would remark, that during the whole of his illness, he had had no symptoms indicating a high grade of febrile or inflammatory action; the pulse has usually been regular, the surface, in the absence of a paroxysm, natural temperature, appetite, for the most part, tolerably good, and all the secretions natural, except in a paroxysm, and which we will notice in their proper place.

I will now attempt a description of a paroxysm, and I have selected the last one he had before I left home, and what I witnessed: The attack came on about midnight, of the 6th of September, the patient was seized with spasms of the right foot, accompanied with the most violent shivering and shaking of the limb, making the very bed to rattle. This continued for some minutes, confined only to the right foot and leg, then, with the quickness of thought, all those symptoms were transferred to the hand and arm of the same side, the fingers clenched, the muscles jerking, the arm shaking and so set that you dare not attempt to fix or extend it; in a short period the head and face became the theatre for operation, the eyes were glared with a frantic wildness, the features of the face were strangely distorted and a terrific confusion of horrible grimaces, frowns and fears were seen displayed almost in the same moment. Anon! even before the thought has time to realize the change, the face is calmed, but the bowels are grasping, as it were, hand to hand, with this mysterious force; you now behold signs of the most intense griping and agonizing pain, every part of the intestinal canal is engaged in the most active manner; perhaps he vomits, perhaps he purges, for, almost always an active diarrhœa is set up. The next metastasis is perhaps to the lungs, then the patient springing up in the bed, calls for help, he strangles, suffocates and gasps for air, mucus secretion from his lungs flows from his mouth, he coughs and struggles, reaches and gasps for breath, he cries and screams, his breathing is labored in the extreme and can be heard for a great distance, and were it not that you hope the paroxysm will speedily take a fancy for some other point of the body, you would despair of the life of the patient, but, soon your hopes will be realized, for, ere you are aware, a foot or hand will begin the struggle, and relieve the lungs, for it is a singular fact, that two parts of the body do not engage at the same time, and the struggle with one foot is but a retreat from the other, thus the patient will continue perhaps for some two or three hours, and exhausted, sink into a half sleeping state for awhile, and then gradually gaining, will, in a few days, feel as well as before the paroxysm.

Treatment. At first, he was put upon the use of mercurials, (blue mass in alterative doses for two or three weeks,) but without

any good effect, he then took a vomit, tartar emetic, with no permanent good ; afterward, quinine, iron and morphia, in large doses, and continued for two months, with no effect,—hyoscyamus and an ointment of belladonna, rhei and colchicum, alternating these remedies for a long time, with iodine and iodide of potassæ ; in a word, the poor fellow has been drugged till he has a holy horror for the thing. Nor has ether and chloroform been neglected, for they too, have been administered ; the ether by the stomach and inhalation, with but little effect ; the chloroform, until insensibility has been induced, and yet the muscles would continue in spasmodic action.

There has been no manifestation of periodicity marking the return of the paroxysm ; the patient has no premonitions of their recurrence.

I have thought the mind has had something to do in inducing a paroxysm. The three last attacks have come on after sudden excitement, especially those that were most depressing, such as bad news, &c.

The sudden application of heat or warmth to the part affected will sometimes cause a sudden metastasis to some other point, and the transmission of a paroxysm from one part to another is felt following the course of the nerves.

Now what is the disease ? I will, I presume, be allowed to give an opinion, though I must confess, that I do so with diffidence. May it not be hypochondriasis ?—if so, it is more aggravated than we usually find it, I apprehend ; but allow me to solicit an opinion from as many of the faculty as may feel disposed to favor me with their views upon the subject.

Respectfully,

M. Y. BROCKET.

PART SECOND.

AMERICAN INTELLIGENCE.

Clinical Observations on the Surgical Diseases of Childhood and Early Life. By JNO. WATSON, M. D.

To the Editor of the N. Y. Medical Times.

DEAR SIR:—It has often been matter of surprise to me, that amid the numerous divisions to which the domain of surgery is at the present day subjected, we have no recognized department for the *Surgical Diseases of Children*. The industrial instinct of modern practitioners is proverbial; it shows itself in almost every conceivable form; it attaches itself to almost every department of the profession, and evinces astonishing ingenuity in striking out new paths to notoriety and wealth; and hence the wonder, that it should, up to the present moment, have wholly overlooked so promising a field as the *Surgical Pathology of Childhood*.

But, to say no more of our industrious specialists, the department of surgery to which I refer is worthy of serious attention; the more so from the fact that, as yet, it has never been thoroughly studied. I cannot refer to a single author who has given it more than a passing notice.

We are all aware that the plastic and growing frame of children is in many respects different from that of the adult, and liable to many incidental vitiations to which the fully developed frame is no longer subject, or subject only in a much less degree. I propose in the present communication, then, to allude very cursorily to a few of these. Had I time to follow out the subject in all its bearings, it might prove a useful as well as interesting study. But I must content myself for the present with simply collating a few cases, as clinical illustrations of some of the accidents to which the limbs of children are exposed.

I. INJURIES ABOUT THE SHOULDER, AND THEIR CONSEQUENCES.

CASE 1. Jane E. Sharp, a child between five and six years old, was brought to me, July 29, 1841, in consequence of a wasting dis-

ease of her left arm. She was unable to raise the arm, or to extend it from the body, but had the free use of the hand and fore arm. The whole limb was smaller than the other. The atrophy had extended to the bones as well as to the muscles and other soft tissues, but was most apparent in the total wasting of the deltoid. The head of the humerus, when the limb was allowed to hang down, would fall from its socket into the axilla; the coracoid process appeared more prominent than natural. The head of the humerus could be replaced without difficulty, but it fell out of its place immediately afterwards. The patient was in other respects a healthy child. Her mother informed me, that when the child was about ten months old she had a fall upon the shoulder, and that the arm had been weaker and smaller than the other ever since. She thinks that of late it has grown considerably, and that the child has rather more use of it than formerly. She has used local irritation, passive motion, and other local treatment, without benefit.

Seeing that the humerus could be held in place by a very slight force, I directed the mother to have a spring bandage prepared by quilting a number of spiral suspender-wires into a fold of muslin (this was before the days of the vulcanized india-rubber,) and this latter made like a sleeve, which should extend from the elbow to the top of the scapula, to be attached below to the fore-arm, and above to a sort of bodice or jacket. The object of this apparatus was to supply contractile power, in imitation of the muscular power, and in such a way as to draw the humerus upwards, and at the same time give the patient full liberty to move the limb. The result of the treatment I am unable to state. But I may here add, that I advised the spring apparatus in this case from having seen its good effects in a case of partial loss of muscular power in the leg and foot, after a protracted disease of the knee joint. The spring bandage, in this latter instance, supplied the loss of power from wasting of the tibialis anticus and other muscles that serve to flex the foot upon the tibia.

CASE 2. On the 23d of September, 1847, a consultation was held at the N. Y. Hospital, in the case of Ann Marr, an Irish girl, aged 17, who had injured her left shoulder by a fall, rather more than five weeks previously. The case had at first been looked upon as one of ordinary luxation into the axilla. But it was soon apparent that no great physical force was necessary to replace the luxated

humerus. The slightest effort sufficed to restore it to its natural position; but from wasting of the muscles, and relaxation of the ligaments, the arm, when left alone, dropped down again immediately by its own weight.

The treatment settled upon, was to secure the arm as in fracture of the clavicle, so as to retain the head of the humerus in its position, and if possible, give the muscles and other tissues about the joint an opportunity to contract to their natural dimensions. This treatment, with the addition of stimulating embrocations, was continued till the 15th of November, when electro-magnetism was applied, and afterwards repeated daily until about the 23d of December, when the patient was able to raise the arm to her head. But as yet she has regained little or no power in her fingers; for these appear to have been enfeebled, if not paralyzed, from the first, probably in consequence of some injury to the axillary plexus at the time of the fall. She continued in this state until the 18th of January, 1848, when she left the institution, with little prospect of any further improvement.

CASE 3. A boy, aged 4, the son of Mr. M., was brought to me from the country, August 27, 1853, who, about five weeks previously, had received some injury in the neighborhood of the right shoulder joint. A day or two before he began to complain, the nurse had taken him on a long excursion, and is supposed to have dragged him by the arm; for, on his return, he was exceedingly exhausted, and complained for some days of his shoulder hurting him. On examination, his mother detected considerable swelling, heat and tenderness over the back of the scapula; and in a few days afterwards, as the pain and tumefaction subsided, it was found that the child had lost the use of the arm, though still retaining the power of moving the fore-arm and hand. When brought to me, there was no tenderness about the joint, the head of the humerus had not yet quite escaped from the glenoid cavity; but the deltoid was reduced to a mere shred; the muscles of the arm, fore-arm and hand, were all wasted and flaccid; and the head of the humerus hung loose in its socket, as if just ready to drop out of it. There is a sense of roughness and grating produced by pushing up the head of the bone and rotating it within the glenoid cavity. The arm hangs useless by the side, except when lifted by the opposite

hand. But he has considerable use of the fore-arm and hand, and is entirely free from tenderness and pain about the injured joint. I advised a supporting bandage for keeping the head of the bone in place, stimulating embrocations, and an ammoniacum plaster over the top of the shoulder. The case is still in progress. I intend, as soon as I am satisfied that there is no latent inflammation about the joint, to resort to the galvanic battery.

Cases somewhat analogous to the foregoing, now and then occur in growing persons, and in them are usually looked upon as paralysis of the deltoid. But the peculiarity of the disease as incidental to children, is that it arrests the development of the limb more or less completely, and allows the head of the humerus to escape very soon from its socket; whilst in the adult, the wasting is principally confined to the deltoid muscles, or at furthest, to the soft tissues, and the head of the bone is not so apt to suffer spontaneous luxation. The two following are instances of the affection in adults.

CASE 4. J. L. Wellington, aged 32, seaman, a native of Massachusetts, was admitted into the Hospital, Sept. 30, 1843, with lameness of the right shoulder, of three weeks standing, without any previous sensible injury, except perhaps, by over-exertion during a gale of wind at sea. The patient's rest is disturbed by a constant dull, heavy pain, which is increased by pressure over the region of the deltoid muscle. But the joint is without other evidences of inflammation. The arm can be moved backwards and forwards, but cannot be elevated without assistance. The deltoid muscle appears to have lost its power of contraction. The general health is good.

The treatment was by anodyne embrocations, followed by blisters, by the local abstraction of blood, by tartar-emetic ointment, and finally, by electricity. His general health appeared, for a time, to have failed; but, under the use of cathartics and bitter infusion, this was again restored. He left the hospital, Dec. 26, 1843, after using the electricity for about a fortnight, evidently much improved by it, and gradually regaining the use of the limb.

CASE 5. Simon Ramm, aged 26, an athletic German seaman, in rugged general health, was admitted January 12th, 1846, with partial loss of motion in his left arm. The loss of power had come on very gradually, and was first perceptible within two months of the time of his admission. He enjoyed the use of the forearm and hand, but

could not raise his arm freely from his body, nor elevate the shoulder. The only apparent lesion in the configuration of the limb, was atrophy of the deltoid. This muscle was soft and flabby, and reduced to about one-third of its natural size. The patient was not aware of ever having injured the limb. Passive motion gives no uneasiness, and there are no evidences of inflammation in the joint.

The case was treated by passing galvanic shocks daily through the limb, by blisters, and by stimulating embrocations, for about six weeks, without much benefit. At the close of this period the relaxation of the parts about the shoulder joint had rather increased than diminished; and now, for the first time, I detected roughness and sensation of grating, attended with a dull sound within the joint, whenever I attempted to work the head of the humerus within its cavity; still, there was no pain or other sign of inflammation. The patient, at the time of leaving the hospital, March 31st, was as little able to use the arm as at the date of his admission.

II. INJURIES AT AND BELOW THE ELBOW.

CASE 6. The first instance that I remember to have met with of loss of power over the muscles of the forearm, as the result of injury in the neighborhood of the elbow, was in the daughter of Mrs. J., then a child of four or five years old, but now arrived at womanhood; she had been playing behind a Venetian door. In pushing her hand and forearm as far as the elbow between the lattice-work of the door, by some accident the limb became twisted in this position, and so injured that in a few days it was found that she had no longer any use of the hand. The forearm became much wasted, and smaller than the other, and continued thus for several months. Frictions, the carrying of a weight in the hand, and other modes of local treatment, were advised. The loss of power continued long after I had ceased to have observation of the case. But in course of time, I believe the child outgrew the injury. I have seen her within a year or two, and I do not know that the arm once injured is at present less useful than the other.

CASE 7. Mary Hays, aged twenty months, born in New York, was brought to the hospital, December 21st, 1843, with an injury near the elbow, caused four days previous by having had the limb

suddenly wrenched by the mother in attempting to lift her. The whole arm at the date of admission was too much swollen to make out very clearly the exact nature of the accident. But by proper position of the limb on a pillow, and the use of an evaporating lotion, the swelling gradually subsided; and on the 1st of January it was apparent that the shaft of the humerus had been separated from its cartilaginous expansion at the condyles near the elbow. On the 5th of January, as the tumefaction had diminished, the limb was put in a paste-board angular splint; and on the 8th of February, the disjoined condyles having again become attached to the shaft of the bone, the case was discharged. How far the use of the forearm was permanently impaired in this instance, I had no opportunity of observing.

The loss of power of the forearm in such injuries as I have now alluded to, is, perhaps, mainly owing to direct injury to the muscles; but there is reason to believe that the nerves are occasionally involved in the primary shock. Thus, I have on several occasions known the pressure of a circular roller near the elbow, in attempts to reduce a luxated humerus, lead to paralysis, more or less persisting, in the muscles of the forearm and hand. A similar instance I have above stated, from injury to the shoulder; and I remember the case of a Swedish woman, who, in consequence of a luxation at the shoulder which had for two years remained unreduced, was totally deprived of the use of the hand and forearm. In these cases the loss of muscular power co-existed with atrophy, and diminished temperature.

III. INJURIES ABOUT THE KNEE, LEADING TO SEPARATION OF THE LOWER EPIPHYSIS OF THE FEMUR.

I must here for the present pass over most that relates to diseases of the joints proper, and confine myself to accidents producing results similar to those already noticed in the upper extremity.

CASE 8. August 29th, 1840, a consultation was held on the case of a lad aged about 16, of scrofulous diathesis, who had been brought to the hospital from the country about three weeks previously, in a state of extreme exhaustion, with high constitutional disturbance, and colliquative diarrhoea; the result of acute inflammation in the neighborhood of the left knee.

About two months previous to admission, he had been suddenly seized with severe pain around the knee-joint and extending along the thigh. The disease soon progressed to suppuration—to ulceration of the integuments, and great tumefaction of the whole thigh. The integument had given way just above the knee, and the lower extremity of the femur appeared to be projecting through the ulcerated opening. An extensive sinus undermined the integument, and ran upwards nearly to the trochanter major. The purulent discharge was immense. The patient, since his admission, had been on the use of tonics and anodyne. The diarrhœa and febrile symptoms had, in some measure, abated; but the state of the weather, and exposure of the ulcerated surface, had led to the generation of maggots in the cavity of the abscess; and confinement to bed had given rise to ulceration of the skin behind the sacrum and trochanters. It was deemed advisable to remove the limb as high up as possible in the shaft of the femur, so as to avoid the track of the abscess. The operation was by the double-flap at about eight inches below the hip joint, and was performed by one of my colleagues. The abscess had extended two or three inches above the line of incision. After the removal of the limb, it was evident that the projection of bone through the opening near the knee, which appeared like the lower expansion of the femur, was, in fact, the expanding portion of the shaft, separated from the epiphysis, which was still in state of cartilage, and attached by the usual ligaments to the upper head of the tibia. The cartilaginous lining of the knee joint was found almost wholly eroded. The head of the tibia, as well as lower part of the femur, was carious; and the whole shaft of the femur had been much softened by the inflammatory process. The case resulted fatally.

An instance somewhat similar to the foregoing, which terminated fatally in less than a month, I heard of recently, as having occurred near Pittsfield, rather more than a year since. The patient was under homeopathic treatment; and the child had the benefit of "wearing out," as the attendants gravely informed the parents, "rather than of dying from the agency of medicine."

A case nearly similar to the one above stated, I remember to have seen in the hospital as long ago as 1837 or 1838. The shaft of the femur was seen projecting through an ulcerated opening in the lower

part of the thigh. The epiphysis, separated from the shaft, was still attached to the tibia by the capsular and other ligaments. The limb was amputated; and, if I remember rightly, the lad ultimately recovered his health. The following appears also to have been an instance of the same disease:

CASE 9. Thomas Brainard, an Irish boy, aged 14, was admitted, April 7th, 1845, with diffused abscess of the left thigh and leg, the result of a misstep and sudden wrench of the knee in ascending a flight of stairs, which happened four weeks previously. The injury had been allowed to progress without treatment until the bursting of the abscess on the inner side of the leg, which occurred some ten days after the injury. Subsequent to admission, other openings were made for the free discharge of matter. The injury of soft parts, however, was so rapid, and the constitutional disturbance so threatening, that on the 19th of April, it was deemed proper to remove the limb. This was done by one of my colleagues. In the hospital registry I find no note of the condition of the parts about the knee after the amputation. I find, however, in my own memoranda, that the case proved to be one of separation of the epiphysis of the femur from the shaft, simulating a luxation at the knee joint. For some days after the operation, the stump progressed favorably; but notwithstanding a supporting course of treatment, the general condition became less satisfactory. Hectic fever and colliquative diarrhæa, alternating with profuse perspiration, gradually exhausted the patient, who fell into a comatose condition, and died in a convulsion on the 6th of May.

As in many analogous cases of exhaustion with profuse suppuration, evidences of pleuro-pneumonia were detected after death. The right lung was found to consist of only two lobes. There were three small abscesses in the lower lobe, with some inflammatory effusions in the cavity of the pleura. The left lung was healthy. There were no evidences of phlebitis.

IV. INJURIES LEADING TO ATROPHY OF THE LOWER LIMB.

CASE 10. The little son of a medical friend, in attempting to imitate his father, by placing his heel against the mantle above the fire-place, gave his hip a severe twist, and for some days afterwards

suffered severe pain in the part. But as the pain subsided, the accident led to no serious apprehension at the time, and had been nearly forgotten, when the boy, at the interval of a few months, began to limp. The case now was carefully watched, and, by several medical men who examined it, pronounced to be incipient disease of the hip joint. The limb became somewhat less plump and muscular than the other; the hip appeared flattened, and though pressure, applied in various ways so as to be communicated to the joint, gave no decided uneasiness, yet on any severe exercise, or after any disturbance of the digestive organs, the boy would limp considerably, and at times suffered pains like those of rheumatism about the hip and knee. He was affected in this manner at intervals for several years, but the pain would at times shift to the opposite limb. In the meanwhile, he was subjected to various modes of treatment, local and general, without any decided effect. But as he gradually grew up to adult age, the limb became as well developed as the other, and the limping and pain entirely disappeared. The true pathology of this case has perhaps never been clearly understood. From the first, I felt satisfied that if the joint had been at all affected, it must have been only in a secondary manner, as connected with a sprain among the muscles, and perhaps mostly in those coming from the inner surface of the pelvis to be attached to the inner trochanter. The shifting to the opposite limb, would give to the case a rheumatic character, and it is not the only instance in which I have known local injury give rise to a general and severe attack of rheumatism.

CASE. 11. A sprightly little girl, of about six years old, was brought to me from the country, in October, 1851, in consequence of lameness. Some weeks previously, while ill of a slight fever, she had fallen out of bed, but was not at the time supposed to have suffered any serious injury. On recovering from her fever, however, she was slow in regaining the use of her limbs; and it was, at the end of five or six weeks, found that she had in some degree lost the use of her right leg. The whole of the right leg and thigh appeared to be less fleshy than the other limb—the tissues were less firm, and the circular measurement in every part of the thigh and leg, except over the bony prominences, was considerably less than in the sound limb. The right hip was flaccid, and there appeared to be slight elongation, as in the early stages of *morbus coxarius*.

But the child was free from pain, and no test of pressure could develop any evidence of augmented sensibility in the hip joint. The case was, thus far, obscure; but under all its aspects, it appeared to me at the time to be one of hip disease. Under this persuasion, I advised rest in the horizontal position, a systematic course of purging by the use of cream of tartar, and the repeated abstraction of blood, in small quantities at a time, by the application of leeches behind the trochanter major.

I saw the child a second time, on the first of December. The limb was now still more evidently wasted than the second one, and its temperature in every part was much reduced; but the length of both limbs was alike. The recumbent posture was again recommended, with the addition of electricity and friction to the affected limb, and the internal use of hydriodate of potassa, as an alterative and tonic.

I saw her for the third time, early in the following spring. It was now apparent that the principal wasting of the limb was in the muscles of the leg, although those of the thigh were less developed than in the other limb. The loss of temperature in the diseased leg was now still more apparent, and its muscles all remarkably flaccid, whilst those of the other limb were plump and solid. The loss of temperature and wasting of the leg below the knee, were also accompanied by dropping of the foot from loss of contractile power of the anterior flexor muscles. It was, in short, very evident from the present condition of the limb, that the principal injury had fallen upon the parts below the knee. In order to arrest the atrophy, and restore the symmetry of the two legs so far as to overcome the lameness, I now advised the continuance of the electricity to the affected leg, a roller to be constantly worn on the sound limb, to prevent it from outstripping the other in growth, and the continuance of the recumbent position, as well as of the alterative medicine. This course was faithfully followed for several months, after which the child began gradually to walk about.

I have again heard from her through the family physician, within a few days. He writes to me, on the 13th of Sept., '53, that her general health is good, though the limb below the knee is smaller than the other. It is, however, evidently increased in size since last seen by me. "She walks half a mile to school, romps and plays

as though nothing was the matter; yet there is an awkwardness in the use of the leg, which I think," says he, "chiefly arises from stiffness of the ankle joint. The muscles of the leg are firmer than they were six months since, and I think she will eventually recover their perfect use." He concludes by remarking that "it is certainly an unusual case."

CASE. 12. A delicate child, from Georgia, a female, two years old, of strumous diathesis, and from parents who had both died of phthisis, was brought to me on the 5th of July, 1853, having then been for several months unable to walk, and extremely unwilling to stand, or even to put the right leg to the ground. I examined her with great care, and could find no difference in the development, plumpness, sensibility, or temperature of the two limbs. The joints were all as supple and flexible as natural. The lameness was unattended with pain, and could not be traced to any known injury. But the child had been mostly entrusted to the care of a negro girl, who might have allowed her to fall, or suffer other injury, without acknowledgment. The case had been considered by the family physician, and others who had examined it in the South, as one of *morbus coxarius*. I put the child on her back, ordered frequent embrocation with a mixture of one part of tincture of iodine to seven of soap liniment, and the daily internal administration of about five grs. of hydriodate of potassa dissolved in syrup of ginger. This course was still in use on the 21st of August, when I last saw the patient. At this period, it had become evident that the child was suffering from no disease in any of the joints, and that the difficulty lay chiefly in the muscles below the knee. The temperature of this part of the limb was now less than that of the other leg, and there was evident tendency to dropping of the foot, from loss of power in the *tibialis anticus* and other of the anterior muscles which serve to flex the foot. The case is still under treatment.

The points most worthy of observation in cases now related are, that injury to the limbs of young persons may lead, first, to arrested development; and to lameness, more or less permanent according to the degree of injury inflicted on the muscular structure, on the nerves, or the firmer tissues; and, above all, if in the lower limb, to the subsequent want of growth in the bones: second, to severe inflammation around the spongy heads of bones, and separation of the

cartilaginous expansions from the more consolidated portions. They further show, that injuries occurring to the limbs of children are often overlooked; and that when they give rise at length to morbid appearances, these latter are often mistaken for those depending on diseases which do not actually exist.

It was my object in commencing this paper, to add a few other illustrations, particularly in reference to the flexibility of the bones of young persons. But this, and other points connected with the surgical diseases of early life, for want of room, I must reserve for some other occasion.

Very truly yours,

JNO. WATSON.

NEW YORK, Sept. 20th, 1853.

ART. II.—*Surgical Cases. Aneurismal Tumours upon the Ear, successfully treated by the Ligation of both Carotids.—Recto-Vaginal Fistula, cured by Operation.* By R. D. MUSSEY, M. D., Professor of Operative Surgery in the Miami Medical College, at Cincinnati, Ohio.

CASE. I. *Aneurismal Tumours upon the Ear treated by Ligation of both Carotids.*—Early in November last, Luther Gordon, æt. 19, accompanied by his physician, Dr. Kramer, came from Indiana, with his head bound up, to this city, on account of aneurismal tumours upon his left ear, and was admitted into St. John's Hospital.

The cavity of the concha was occupied by a pouch which rose above the level of the antitragus, and another covering the tragus and extending some way anterior to it, and pushing outward, was as large as a middling-sized nutmeg. Continuous with the upper part of this was a considerable elevation of the integument which covered the scaphoid fossa, and an inch and a half of the fossa innominata. Below the root of the ear, in the depression between the mastoid process and the ramus of the jaw, and partially covered by the lobulus, was a globular tumour of the same character, as large as a moderate-sized Isabella grape. All these tumours, or pouches, were elastic, and compressible almost to obliteration, pulsated strongly and seemed to have a communication with each other, like the por-

tions of an arterial varix. The whole circumference of the ear was larger than that of the other, and its integuments everywhere hypertrophied.

L. G. was of a medium stature, with auburn hair and hazel eyes, and, although somewhat delicate in appearance, had enjoyed, from childhood, a pretty uniform health. From birth there was a cutaneous nævus in front of the left ear, but it attracted no particular attention. About eight years ago small elevations of the integument were observed at the points already described as the site of the tumours, in which pulsation was perceptible, especially after exercise. This, together with the size of the tumours, slowly increased, until, a month before he came here, the posterior extremity of the pouch occupying the fossa innominata burst open, causing alarming hemorrhage. This was suppressed by compression; and, subsequently, when the bandage and compresses were removed, the crust covering the opening, gave way, and a pulsating jet of arterial blood flowed.

With reference to the treatment of this case, the most promising course which presented itself, was the ligation of one or both carotids. The success which followed the tying of the primitive carotid, by Mr. Travers, in 1809, for "aneurism by anastomosis of the orbit;" and in a similar case by Mr. Dalrymple, in 1813; and also the tying of both carotids, by Dr. J. Mason Warren, in a remarkable case of vascular tumour of the mouth, face, and neck, in 1846, afforded encouragement for this procedure; yet the case I had in 1829, in which I tied both carotids for a large vascular pulsating tumour on the vertex of the head, not having been cured until the tumour was dissected away, left room for doubt whether, in the present instance, the ligation of both carotids even, might not fail of accomplishing the end desired. I determined, however, to resort to the application of a ligature to one of these vessels, possibly to both. The patient had been kept chiefly on farinaceous food since the first outbreak of the hemorrhage, and it was now enjoined upon him to live wholly without animal food until the operation.

On the 18th of November, I tied the left carotid. The pulsation in the tumours ceased on tightening the ligature, and did not afterwards return. His food was strictly farinaceous, with water for his only drink. After the lapse of ten days, a little milk was allowed.

No unpleasant symptom occurred, except that when he began to sit up, which he was permitted to do in twelve days, he complained of indistinctness of vision in the left eye. It continued for several days, though less and less marked, till it ultimately subsided altogether. This symptom, indicating a defective supply of blood to the visual apparatus, has been sometimes observed, but I had not myself before noticed it in either of the six cases in which I had applied a ligature to the common carotid. A slow reduction of the tumours took place; but, as it was quite doubtful whether a cure would follow, I proceeded, in four weeks, to ligate the right carotid. A slight effect was observed on the vision of the right eye when the patient began to sit up, similar to what had taken place with the other.

The two operations were performed while the patient was asleep from the inhalation of a mixture of chloroform, one part by measure, and washed sulphuric ether, two parts. Both arteries were tied just below the crossing of the omohyoid muscle. One ligature came away in sixteen days, the other in twenty. After the second operation the reduction in size of the tumours was much more rapid. In about three weeks, collodion was applied and repeated every two or three days. This seemed very much to promote the contraction of the pouches, and on the 28th of January, viz., *seven* weeks from the last operation, L. G. left for home with scarcely a vestige of the tumours remaining. I considered the result of the operations to be a permanent cure.

The last of April, three months after the patient went home, one of his physicians, residing near him, called on me, and gave the assurance that there were no remains of the swelling, and that he regarded the case as perfectly cured.

CASE. II. *Recto-Vaginal Fistula*.—Mrs. G., æt., 28, of fair complexion and delicate appearance, but possessing a pretty good constitution, apparently free from hereditary tendency to disease, was married between five and six years since. Being subject to costiveness, the recto-vaginal wall, under the influence of undue pressure, gave way some time after marriage, and a fistulous opening remained. This was somewhat enlarged during labour with her only child, which was born some two years after matrimony. Being very cleanly in her habits, Mrs. G. was able to keep herself comfortable when the feces were of a firm consistence, but when diarrhœa, or a

state approaching it, existed, a considerable portion of the contents of the rectum passed through the vagina. All along, the monthly evacuation was uninterrupted, and the state of the bowels was regulated by aperients and injections.

On the 25th of March, 1853, I performed the first operation, which consisted in a division of the sphincter ani on one side, the object of which was to promote the contraction of the fistula by allowing the feces to pass through the anus without effort. Before this wound was quite healed, I proceeded, on the 20th of April, assisted by my son, Dr. Wm. H. Mussey, Dr. A. M. Slocum, and Dr. Logan, to the second operation. The hair having been removed from around the anus and posterior part of the vulva, the patient was put into the anæsthetic state by the mixture of chloroform and ether, and placed in the position usually chosen for lithotomy, the lower limbs being supported by assistants. A bivalve speculum was passed into the anus, while the sides of the vulva were drawn aside. In this state of tension of the parts, the fistula, brought fully to view, was sufficiently large to admit the two fingers. It was slightly oval shaped, its longest diameter forming an angle with the median line. The edges of the opening were freshened by a straight, narrow, sharp-pointed bistoury, and brought in contact and sustained by the *clamp suture* of Dr. Sims, of Alabama. A piece of elastic gum catheter was secured in the urethra; and the urine, the whole of which passed through the instrument, was received by a sponge, or a folded cloth. The catheter was removed and cleaned every second or third day, and returned to its place, or replaced by a new one. The patient lay chiefly on her back, sometimes upon her side. She slept well the night after the operation, after taking the eighth of a grain of the sulphate of morphia. She took this dose but once more during her confinement; in a few instances, when a little restless at evening, she took a teaspoonful of the fluid extract of valerian. She generally slept well at night. The pulse was scarcely, if at all accelerated; there was no thirst; the tongue was clean; and there was no headache, except a little in the mornings after morphia or valerian had been taken.

This undisturbed state of the system was to be attributed, in a great measure, to the unstimulating and spare diet which was persevered in. Up to the eighteenth day from the second operation, she

lived on *two to two and a half crackers a day*. The whole weight of this solid food was *less than five ounces*; the only drink was cold water. On the *eighteenth* day, a gill of milk for the twenty-four hours was allowed in addition. The vagina was daily injected with water, and mopped dry. On the *seventh* day the stitches were cut out, and the wound was found united through the whole extent. The catheter was left on the *eighteenth* day, and the patient allowed to be bolstered up a little in bed for half an hour, which was repeated two or three times a day afterwards.

On the *twenty-fourth* day, a motion of the bowels was procured, by two drachms of castor-oil made into an emulsion with mucilage, and given every three hours until it operated. Nothing had passed the bowels all this while, except occasionally a small quantity of gas. From this time Mrs. G. took more food; was soon able to sit up all day; and left for home on the *twenty-second* of May, four and a half weeks after the operation. Two weeks after she had returned home, she wrote that she was well in all respects.

Dr. Sims is well entitled to the thanks of the profession for having introduced what he calls the *clamp suture*, in the treatment of vesico-vaginal fistula, consisting of two cylinders of silver, or lead, perforated at several points, for the passage of pieces of small silver wire, which are to supply the place of thread, and which are to be prevented from slipping by perforated shot carried down upon them, pressed against the cylinders, and kept in place by being firmly pinched with pliers. Dr. S. makes his cylinders one line in diameter, and his wires of the size of a horse-hair.

In the case of Mrs. G., I used leaden cylinders, a line and a half in diameter, believing that they would be less liable to become imbedded, and to cause ulceration in the soft parts against which they are pressed; they were perforated too at distances of *one-fifth* of an inch, instead of *one-third*, or more, of an inch, as practiced by Dr. S. I see no objection to the stitches being within the fifth of an inch of each other, inasmuch as there is little, if any, tendency to suppuration around the wires; and there seems to me to be this advantage from the near stitches, viz., that the parts intermediate to them may be brought into sufficiently firm contact for adhesion, with a

less amount of pressure, and of course with less liability to strangulation of the vessels of the parts included in the suture. Dr. Thomas, in the eastern part of Ohio, now of Pittsburgh, Pa., who treated a case of vesico-vaginal fistula with entire success, placed his stitches in the clamp suture about the fifth of an inch apart. The wire which I employed in the recto-viginal fistula, was not far from twice the diameter of a horse-hair. I suppose that the shot compressed upon it is a little less liable to slip than upon one only half the diameter. The stitches were entered about one-third of an inch from the cut edge of the opening and carried as deep as possible, without passing through the mucous lining of the rectum. When the suture was removed on the seventh day, it was found that a slight ulceration existed where the extremity of one of the cylinders lay. This was healed in a few days.

CINCINNATI, June 20, 1853.

P. S. I saw Mrs. G. on the 30th of July, more than three months after the operation, in a state of perfect soundness of health.

August 25, 1853.

ART. III.—*An Essay on Sore Throat, or Chronic Pharyngitis.*
Read before the Memphis Medical Society, May, 1852. By A. P.
MERRILL, M. D.

This disease is of frequent occurrence, sometimes being caused by acute inflammation of the lining membranes of the throat, and sometimes by scarlatina, measles, exposure to cold, etc. It consists of a subacute inflammation or hyperæmic condition of the mucous membrane of the pharynx, frequently involving the tonsils and palate, the glottis and epiglottis, and extending into the nares and Eustachian tubes, and even into the external meatus of the ear. The membrane presents in these cases a highly vascular condition, and sometimes an evident thickening or hypertrophy, and not unfrequently an cedematous tendency.

In cases of severity there is a pretty constant tickling in the throat, producing a disposition to cough or to hack, a feeling of irritation and roughness about the palate and glottis, painful deglutition, and an increase of all the unpleasant symptoms consequent upon an

overstraining of the voice, followed by hoarseness, and in some instances by temporary or permanent aphonia. In such cases, the secretions from this membrane are nearly suspended; but with a partial abatement of vascular action, a viscid mucus is formed, which adheres closely to the surface, and by the irritation it produces, causing coughing.

As in other cases of subacute inflammation of the mucous membranes, a long continuance of this disease sometimes leads to ulcerations. The ulcers are generally of a phagedenic character, spreading rapidly, with considerable waste of substance, and exceedingly sensitive to the touch. The act of deglutition, while these ulcers exist, is attended by acute pain, like the thrust of sharp instruments into the flesh. Sometimes the ulcerative process is of the pustular character, producing pustules or pimples considerably elevated and filled with matter. This form of the disease has been called "Follicular Pharyngitis."

Chronic Pharyngitis sometimes has its beginning in early youth, and continues without any very urgent symptoms for many years. Persons troubled with this form of the disease are apt to experience a tickling in the throat, attended by a collection of viscid mucus, and a disposition to cough, or to hawk, upon every sudden transition from warm to cold air, and particularly upon first going out in the morning, in cold and damp weather. But these symptoms pass off as the day advances and the system becomes warmed by exercise.

When the hyperæmia and turgescence are much increased from any cause, a rupture of some of the engorged blood-vessels is a common occurrence, and the patient ejects mucus tinged with blood, which is hawked up from the throat. By close attention to this act, it is easy to distinguish such cases from those of bronchitis, in which bloody sputum is coughed up from the lungs. And it is not difficult for an experienced observer to distinguish pharyngitis in all its stages from laryngitis, trachitis and bronchitis, even by the act of coughing or of ejecting sputum from the throat by convulsive efforts, which are short of coughing, generally called hawking or clearing of the throat. Pharyngitis leads to the establishment of those other diseases, however, by the extension of the diseased action into the air passages, and then the two affections exist together. This is the

result so much to be dreaded, and which makes the early and skillful treatment of the disease of the utmost importance.

Habitual coughing, to a greater or less extent, is a common symptom attending pharyngitis, and it is one which requires our particular attention. I believe it is a well ascertained fact, that the lungs cannot be exercised by frequent and long continued coughing, from any cause, without danger of the most serious consequences. The bronchial tubes are certain, sooner or later, to take on an excited and diseased condition from this convulsive movement, with every danger of hemorrhage and ulceration supervenient, attended by hectic fever and other characteristic symptoms of phthisis pulmonalis. Indeed, a large majority of the cases of consumption which I have met with, have had their origin in a cough proceeding from the irritation caused by chronic pharyngitis. Persons of a strumous habit, and those who labor under the disadvantages of a hereditary taint, are perhaps more liable to this result than others, and experience its fatal influence in a shorter period of time; but the exciting cause is the same, and the course of the disease very similar.

This disease is commonly called *bronchitis*, but this is an erroneous designation, for the bronchial tubes are not primarily affected, and when they do become seriously involved in the diseased action, it is not long before a name of more fearful import is assigned to it. We hear then of consumption and not bronchitis.

Public speaking is one of the most exciting causes of pharyngitis, and clergymen, therefore, appear to be particularly obnoxious to it. This arises mainly from the unnatural and labored efforts which they are accustomed to make, together with their want of knowledge of the physiology and philosophy of the human voice. These efforts are in some cases repeated very often, in consequence of the high estimate which Christians of the present day place upon much preaching; and they are frequently made in over-heated and corrupted atmosphere, the transition from which to a cooler and purer medium, in a state of fatigue and exhaustion, has a strong tendency to enhance the ill effects.

The usual remedies for this disease are counter-irritants externally, and stimulating and escharotic applications to the diseased surface. The former consist of blisters and various kinds of stimulating embrocations, accompanied by the use of flannel or silk to protect the

throat from the influence of the cold air. The beard is sometimes permitted to grow for the same purpose. Sometimes a contrary course has been pursued, and the whole neck has been bared to the weather, with frequent cold ablutions, general cold bathing, and even the application of ice. These various remedies have their advocates, and no doubt all have proved useful under certain conditions.

The applications made to the throat, internally, are capsicum, the sulphates of copper and zinc, nitrate of silver, etc. Capsicum has been found very useful in many cases, from its actively stimulating effects upon the torpid vessels, by which they are made to contract their calibres, and thus reduce the prevailing hyperæmia. A healthy secretion of mucus sometimes follows this application, and a consequent relief of urgent symptoms. The principal fault in its application consists in its being prescribed as a gargle. Used as such, in the general acceptance of the term, it does not reach, to much extent, the diseased surface, but comes in contact principally with the mouth, and lips, annoying the patient by its burning stimulation, without much influence over the disease. The best way of applying it is, by the use of a camel's hair brush, or a bit of sponge, using a strong decoction, and washing it well over the diseased surface. Or, if the patient throws back his head, and by the use of a small spoon carries a few drops far back upon the root of the tongue, and then swallows with the throat in this straightened position, he will bring the liquid into contact with a considerable portion of the diseased membrane, and avoid at the same time, its unpleasant effects upon the lips.

The nitrate of silver has latterly been in higher repute in the treatment of this disease, than any other tropical remedy; and it is at this time, I believe, more generally prescribed. It is no doubt valuable and I have myself witnessed the happiest effects from its application, both in solution and in substance. In one case of considerable violence, however, phagedenic ulcers formed in the throat while the patient was applying a strong solution of the nitrate of silver to the part affected, three times a day. These ulcers were cured, and the disease greatly relieved by the substitution of a solution of sulphate of copper. But I need not pursue this subject of treatment, which is so familiar to you all, and will therefore proceed, without further remark, to the special object of this paper.

It will be recollected by some of the members present, that several months ago I invited the attention of the society, verbally, to the use of iodine as a topical application to the internal throat, in this disease. I had at that time only a limited experience with the remedy, but had witnessed remarkable effects from its use in several cases. And now, after some further trials by myself and others, I am so far confirmed in my favorable opinion of the remedy, as to feel myself called upon by a sense of duty to the profession, to the society, and to mankind, to direct your attention to the subject in a more formal manner.

Having been in the constant use of this remedy in my practice for more than a year, and having succeeded in relieving several cases of chronic pharyngitis with it, which had resisted the use of other active means of cure, I now venture to recommend it as a valuable remedy, and to request the members of this society to put its merits to the test of experiment, as they have opportunity, and to report the result to the society.

The following is a convenient formula, which may be applied to the throat, with a camel's hair brush, once or twice a day, or as often as the patient feels a tickling sensation or a desire to cough. Persons afflicted with this disease will find it advantageous to have the remedy at hand during the night, so that the cough may be arrested at once, whenever it becomes troublesome:

R	Iodide of potassium.....	3j.
	Iodine.....	3ss.
	Water....	3j.
	Gum Arabic	3ij.
	White sugar.....	3ij.—Mix.

For the external meatus of the ear the following is used:

R	Iodide of potassium.....	gr. vj.
	Iodine	gr. iij.
	Water	3j.
	Glycerine	3ij.—Mix.

In some cases of long standing, this solution proves to be too weak. It should be of strength to produce a slightly burning sensation. The glycerine is important on account of the dryness of the meatus, which nearly always attends these cases, and this may be

increased at pleasure. A few drops may be put in the ear once or twice a day, and in cases of severity, or insensibility, a lock of cotton may be charged with the solution and suffered to remain in the ear. It must be borne in mind, however, that in many cases of diseased ear, the *maetus externus* is extremely sensitive, and will not bear the application of iodine. Proper caution should therefore be observed in its use, lest it prove too stimulating and give pain.—*N. Orleans Journal*.

ART. IV. *Report of Prof. Gross on Malignant Diseases.*

The following abstract was read at the last meeting of the American Medical Association. Prof. Gross' report in full will appear in the Transactions of the Association :

From the facts and statements which have now been presented, embracing the opinions of many of the most intelligent, experienced and distinguished practitioners in different ages, and in different parts of the world, the following conclusions may be legitimately deduced :

First—That cancerous affections, particularly those of the mammary gland, have always, with a few rare exceptions, been regarded by practitioners as incurable by the knife and escharotics. This opinion, commencing with Hippocrates, the father of medicine, has prevailed from the earliest records of the profession, to the present moment. Nature never cures a disease of the kind ; nor can this be effected by any medicine, or internal remedies known to the profession.

Secondly—That excision, however early and thoroughly executed, is nearly always, in genuine cancer, followed by relapse, at a period varying from a few weeks to several months, from an operation.

Thirdly—That nearly all practitioners, from the time of Hippocrates to the present day, have been, and are still averse to any operation for the removal of cancerous tumors, after the establishment of ulceration, rapid growth, firm adhesion, organic change in the skin, lymphatic invasion, the cancerous dyscrasy, or serious constitutional derangements ; on the ground that, if had recourse to, under these circumstances, the malady almost invariably recurs in a very short time, and frequently destroys the patient more rapidly than when it is permitted to pursue its own course.

Fourthly—That in all cases of *acute carcinoma*, or, in other words, in all cases of this disease, attended with very rapid development and great bulk of the tumor, extirpation is improper and unjustifiable, inasmuch as it will only tend to expedite the fatal result, which, under such circumstances, always takes place in a very short time.

Fifthly—That all operations performed for the removal of encephaloid cancer and its different varieties, are more certainly followed by rapid relapse than operations performed upon schirrus or hard cancer.

Sixthly—That in nearly all the operations for cancerous disease, hitherto reported, the history has been imperfectly presented, being deficient in the details which are necessary to a complete and thorough understanding of the subject in each case. This remark is particularly true in reference to the diagnosis of the malady, the minute examination of the morbid structure, and the history of the case after the operation, as to the period of relapse, the time and nature of the patient's death, and the result of the post-mortem examination.

Seventhly—That cancerous affections of the lip and skin, now usually described under the name of cancrroid diseases, are less liable to relapse, after extirpation than genuine cancerous maladies, or those which are characterized by the existence of the cancer cell and cancer juice.

Eighthly—That, although practitioners have always been aware, from the earliest professional records, of the great liability of cancer to relapse after extirpation, a great majority of them have always been, and still are, in favor of operation in the early stage of the disease, especially in schirrus, before the tumor has made such progress, or before there is any disease of the lymphatic ganglions, or evidence of the cancerous cachexy.

Ninthly—That many cases of tumors, especially tumors of the breast and testicle, supposed to be cancerous, are in reality not cancerous, but of a benign character, and consequently, readily curable by ablation, whether effected by the knife or by escharotics. It is to this circumstance that we must ascribe the astonishing success which is said to have attended the practice of Hill, of Scotland, Nooth, of England, and Flajani, of Italy.

Tenthly—That all operations insist upon the most thorough excision possible; removing not merely the diseased mass, but also a

portion of the surrounding and apparently healthy tissues, as well as the enlarged and indurated ganglions.

Eleventhly—That the practice has always prevailed, and still obtains, to save, if possible, a sufficient amount of healthy integument to cover the wound, and if possible, to unite it, by the first intention; on the ground that these precautions will tend much to retard, if not prevent, a recurrence of the disease.

Twelfthly—That much stress is laid by writers upon a properly regulated diet, and attention to the bowels and secretions after operation, as means of retarding and preventing relapse.

Thirteenthly—That there is no remedy, medicine or method of treatment which has the power, so far as we are enabled to judge of its virtues, of preventing the reproduction of the morbid action after operation, no matter how thoroughly it may be performed.

Fourteenthly—That life has occasionally been prolonged and even saved by operation after relapse, as in some of the remarkable cases mentioned in a previous part of this report; but that, as a general rule, such a procedure is as incompetent to effect a permanent cure as a first extirpation.

ART. V.—*Yellow Fever Epidemic of 1853 in New Orleans.*

About the 26th of May last, the first case of yellow fever entered the Charity Hospital, and after death black vomit was found in the stomach. The first fever cases originated among the shipping along the Levee, in the Fourth District, from which point it extended rapidly through the adjacent portion of the town. A large population of unacclimated persons, living in wooden huts, with floors and timbers soaked in water, and half decayed were, seized with the disease in the most malignant form. For some time previously rain had fallen almost daily, and this, added to a hot, burning sun, seemed to give strength to the poison, and lent intensity to the disease. The streets in this vicinity, for the most part, were unpaved, or planked, and the culverts, gutters, etc., were filled with water, saturated with filth and decaying vegetable and animal matter. The crowded state of these huts and low wooden tenements, with their floors steeped in mud and water, is admirably calculated to generate and propagate the germ of a disease which had already been sown in their midst.

The habits of these people (being chiefly Irish and German laborers,) notoriously negligent and filthy, and utterly indifferent to all those precautionary measures which a limited knowledge of the laws of hygiene should suggest, served only to add fuel to the conflagration which was destined to extend its ravages to every portion of our devoted city. Hence, for some time, the yellow fever confined its work of death within particular localities; but, by and by, gaining strength by what it fed upon, it began to travel to other and more distant points—to extend its arms, so to speak, in every direction, until it grasped the Four Districts within its deadly embrace. For some time the hope was entertained that those who paid proper regard to personal comfort and cleanliness, who dwelt in high, airy, and well-ventilated apartments, might escape the disease; but this proved a delusion. It soon became apparent that, as heretofore, the epidemic fever was no respecter of persons; the master was stricken down with the servant, the mistress with the maid, the proud and wealthy were brought to a level with the humble and needy. All who had not passed through some one of our epidemic seasons were exposed to attacks from the disease. As has been already mentioned, the fever made its appearance in the latter part of May, at least a month and a half earlier than usual, and from the first case up to the present, it steadily increased almost daily, until the mortality per diem exceeded that produced by any epidemic known in the annals of our sanitary history. In recording the fearful ravages of the present epidemic, we must not forget that we have remained exempt from any such visitation since 1847; and during this time an immense population of unacclimated persons, both from Europe and the north-western part of our own country, have been accumulating in our city. The number of unacclimated persons in the city, at the breaking out of the epidemic, has been estimated at 30,000 souls; but many of these, it is fair to suppose, have left the city to escape the disease.

The type of the epidemic differs but little from that to which we have been subject in former years, and the belief that persons had died of the disease in six and eight hours from the moment of seizure can readily be explained by a better knowledge of the antecedent history of the case; for, on inquiry, it would generally be found that such individuals have had slight fever, and other symptoms of the epidemic, for two or three days previously to taking their bed and calling in medical aid. This surmise gains additional strength from

the fact that the attack, in many instances, has been so insidious and destitute of alarming symptoms, that it is with difficulty such persons could be persuaded to submit to the usual restrictive treatment.

It is not strange, therefore, that such cases, which had been neglected for two or three days in the early and curable stage of attack, should terminate in fatal black vomit in a few hours after the physician is summoned to the bedside of his patient. So much for the apparent malignity of the present epidemic. In making the foregoing explanation, we aim not to deny the existence of an occasional case of extreme severity; so severe, indeed, as to terminate in death in a few hours, in spite of the best efforts of the most skilful physician, and the most careful nursing.

In some instances, the system seems so thoroughly saturated with the poison of the disease, from the very moment of seizure, that no system of medicine, as yet suggested, seems able to cope with and stay the fatal tendency of the fever. Every medical man, who has had much experience in the disease, must remember occasional instance of this kind.

The disease, this season, though essentially the same in many of its most prominent features, exacts, perhaps, on the part of physician and nurse, more care, diligence and precaution, to terminate favorably, than usual in our epidemics. The slightest imprudence, either in diet, exposure, or excitement of any kind is almost certain to superinduce a relapse, from which state it is usually very difficult to extricate the patient. Hence the great mortality among those who are not only ignorant of the peculiarities of the disease, but who are also unable, and in some instances unwilling, to pay for the requisite medical aid and attendance.

We refer to our table below, furnished by Dr. Simonds, the active Secretary of the Board of Health, for a full account of the deaths, and other particulars which have occurred since the epidemic broke out. By this it will be seen that yellow fever has done terrible execution among our unacclimated population, has produced a mortality unparalleled in the history of our ill-fated city. Even while penning these lines the fever is sweeping off over *two hundred per diem*, and from present appearances, it is likely to continue its fearful ravages for perhaps weeks to come.

Our quondam associate, Dr. Fenner, will, in due time, give us a full and detailed history of this epidemic, as he did that of 1847,

when the disease shall have run its course, and done its work of death.

Below we give the mortality produced by the epidemic, in the city of New Orleans, from the 28th May, up to the 26th August, inclusive, for 1853.

The Epidemic.—Total number of deaths by yellow fever and other diseases, from May 28 till date:

Week ending		Total.	Yellow Fever.		Other Dis.	Not stated.
May	28.....	140—140	1—	1	139—139	..
June	4.....	157	1		156	..
June	11.....	154	4		150	..
June	18.....	147	7		140	..
June	25.....	167—625	9—	21	153—604	..
July	2.....	177	25		152	..
July	9.....	188	59		129	..
July	16.....	344	204		140	..
July	23.....	617	435		182	..
July	31.....	884—2210	704—1427		138—741	42
August	1.....	142	106		25	11
"	2.....	135	115		14	6
"	3.....	146	124		17	9
"	4.....	166	135		15	10
"	5.....	150	128		9	13
"	6.....	238	194		30	14
"	7.....	209—1186	165—967		40—150	4—69
"	8.....	219	187		23	9
"	9.....	201	166		21	14
"	10.....	230	193		33	4
"	11.....	233	192		13	18
"	12.....	207	180		25	2
"	13.....	214	179		22	13
"	14.....	232—1526	191—1288		26—163	16—75
"	15.....	217	187		24	6
"	16.....	193	163		19	11
"	17.....	219	191		21	7
"	18.....	219	188		22	9
"	19.....	234	203		15	16
"	20.....	224	184		29	11
"	21.....	269—1575	230—1346		24—153	15—75
"	22.....	283	239		29	15
"	23.....	258	220		24	14
"	24.....	222	188		23	11
"	25.....	218	186		19	13
"	26.....	193—1074	151—884		29—124	13—66
Total.....		8336	5934		2075	327

N. B. The returns from St. Patrick's Cemetery, since the 31st July, not having been duly made, cannot be relied on, except for two weeks, when the books were resorted to by the Secretary, to enable him to make a weekly report.—*New Orleans Medical and Surgical Journal*, Sept. 1853.

ART. VI.—*Quinia in Yellow Fever.*

The editor of the *New Orleans Medical and Surgical Journal* states (No. for Sept. 1853) that his "experience during the present epidemic, with the sulphate of quinia, has convinced him that large doses of this salt cannot be relied on in the early stages of the attack.

"In the commencement of the epidemic, the advocates of large doses of quinia soon found that this article, when given in sedative doses, failed to accomplish a cure, although the febrile symptoms gradually gave way to its use.

"As the epidemic progressed, and its type and characteristic symptoms became better known, few, as far as we can learn, ventured to give large and repeated doses of this salt, except in particular instances. In our previous epidemic of yellow fever, the quinia practice succeeded best; but it is generally conceded, as far as we could ascertain, that this season it failed in a majority of cases to sustain its previous high reputation as a powerful curative agent. Hereafter, we shall have more to say on this subject."

PART THIRD.

FOREIGN INTELLIGENCE.

PRACTICAL MEDICINE.

ART. I.—*On the Elimination of Lead by Iodide of Potassium.* By E. A. PARKES, M. D., Professor of Clinical Medicine in University College. (Supplement to a Memoir by M. MELSSENS, on the use of Iodide of Potassium in Mercurial and Saturnine Poisoning.)

In the memoir of M. Melsens, so ably translated by Dr. Budd, in the last number of this journal, the statement, that the compounds formed by the union of mercury and its salts with certain of the tissues, can be destroyed, and the metal be dissolved by iodide of potassium, and be eliminated through the kidneys, is proved not only by clinical testimony, but by actual chemical evidence of the presence of mercury in the urine. The elimination of lead in the

same way is rendered highly probable by the solubility of the saturnine salts and compounds in iodide of potassium, and by the undoubted prophylactic and curative powers of iodide of potassium in cases of impending or actual lead-poisoning. M. Melsens did not, however, chemically prove that lead could be made to pass off by the urine in the same way as is undoubtedly the case with mercury, and he left, therefore, a gap in the chain of evidence for future observers to fill up. A case of saturnine paralysis has lately occurred to the writer, in which iodide of potassium appeared to cause the elimination of lead in the urine—a fact which seems to complete the argument of M. Melsens.

A painter, aged 38, was admitted into University College Hospital, in February, 1853; he had suffered for more than two years with paralysis of the extensors, and in a less degree, of the flexors, of both fore-arms; there was a well-marked blue line along the edge of the gums. He had been incapable of work for eighteen months, and had therefore not been exposed for a long time to any fresh source of poisoning. He has been treated for two months very carefully, but ineffectually, in the Middlesex Hospital, and among other means, by “sulphur baths.”

Professor Williamson was so good as to undertake the examination of the urine for lead, in the Birkbeck Laboratory of University College. He was furnished with four specimens: 1st. The urine of February 2d to 3d, no medicine having been given. 2d. The urine of February 3d to 4th, no medicine having been given. 3d. The urine of February 4th to 7th, 70 grains of iodide of potassium having been taken. 4th. The urine of February 7th to 10th, 90 additional grains of iodide of potassium having been taken.

Lead was not detected in the first two specimens of urine, but it was found in the urine passed after the employment of the iodide of potassium. I subjoin the report from the Birkbeck Laboratory:

“Four different portions of urine were received; two voided before the iodide was given, two voided afterward.

“Equal portions of the urine, Nos. 1 and 2, were evaporated to dryness; the black mass which remained was calcined, and the fused salt was boiled with excess of chlorine water. This treatment was adopted in order to get evidence of lead from the insoluble sulphate. The solution with chlorine was tested carefully for lead, but none could be detected.

"The portions of urine voided after the medicine, were treated as follows :

"About a pint of the urine was evaporated, and the organic matter destroyed by aqua regia, and the remaining salt fused, and boiled for some time with carbonate of soda. After having collected the precipitate and undissolved portion, it was well washed, and then treated with dilute nitric acid. The filtered solution was tested for lead with sulphureted hydrogen, and it yielded a black precipitate of sulphide of lead. From the sulphide of lead from one of the urines, a distinct, though a very minute, metallic globule of lead was obtained.

"The quantities of lead present in the urine Nos. 3 and 4, seemed to be about equal, but too small for quantitative estimation.

"BIRKBECK LABORATORY, March 3d, 1852."

It may possibly still be questioned whether lead might not have been detected before the use of the iodide, had the second and more delicate process been employed. This is, however, unlikely, for not only was the first process a very good one, but it can hardly be conceived that lead could have been passing off daily with the urine, before the employment of the iodide, without some improvement having taken place in the symptoms. So far from the symptoms having improved, they had been quite stationary for a long time, as usually observed in this obstinate form of paralysis. The compounds formed by lead with the tissues are well known to be extremely stable ; and judging merely from the duration of the disease, the normal disintegration of the tissues appears in most cases quite insufficient to cause the elimination of the metal.

The iodide of potassium was administered in ten-grain doses, and on an empty stomach, in order to prevent decomposition by acids—a change which appears to destroy half its power. It was intended to combine galvanism with it, but unfortunately the patient having behaved improperly was obliged to be dismissed from the hospital. At the date of discharge no improvement in the symptoms was apparent.

The only other points determined in respect of the urine were the influence of the iodide on the water and sulphuric acid.

Effects of Iodide of Potassium on the Water and Sulphuric Acid.

Date.	Medicine.	Urine, No. oz. in 24 hours.	Reaction.	Sulphuric acid in urine in 24 hrs.	Remarks.
February 2, 3	None.....	46	Acid;	23.46	
" 3, 4	".....	44	"	31.90	
" 4, 5	{ Ha'st. purgans, pot. iodine } grs. x.	18	"	24.426	{ Several very loose stools, no urine with them; lithates.
" 5, 6	Pot. iod. $\frac{1}{2}$ dr....	32	"	15.520	
" 6, 7	Pot. iod. $\frac{1}{2}$ dr....	54	"	26.784	
" 7, 8	Pot. iod. $\frac{1}{2}$ dr....	40	"	27.08	Commenced to be iodized. Strongly iodized.
" 8, 9	Pot. iod. $\frac{1}{2}$ dr....	48	"	33.536	
" 9, 10	Pot. iod. $\frac{1}{2}$ dr....	.....	.....	.....	{ Some urine lost by mistake, 39 oz. measured.
" 10, 11	None.....	33 $\frac{1}{2}$	"	26.197	Effects of iodide passing off.
" 11, 12	".....	40	"	20.760	
" 12, 13	Haust. purgans..	.....	.....	.....	{ Some stools on the 12th, urine with them.
" 13, 14	None.....	54	.....	30.076	Not iodized.
" 14, 15	Pot. iod. one scrup.	55 $\frac{1}{2}$	"	30.305	Galvanism.
" 15, 16	Pot. iod. two scrup.	54	"	28.134	Galvanism.

The iodide, in doses of 30 grains in 24 hours, did not seem to have much effect on the water, and very little on the sulphuric acid. It is probable, indeed, that in most cases, this remedy has not the disintegrating and destructive effect of the alkaline salts of potash, although it possibly heightens this effect when combined with them.

The singular decrease in the quantity of water on the 4th, 5th, and of the sulphuric acid on the 5th, 6th, is an interesting point, as it forms the fourth instance in which a striking decrease of sulphuric acid in the urine has been noticed after catharsis. The coincidence is worthy of inquiry, although it may turn out, on a more extended examination, to have been merely accidental.—*British and Foreign Medico-Chir. Review.*

ART. II.—*Abstract of Eighteen Cases of Typhus Fever, treated in King's College Hospital by the free exhibition of Brandy, &c., under the care of Dr. TODD.*

We have recently watched with great interest a series of severe cases of typhus fever, under the care of Dr. Todd, in this hospital, in which an almost uniform plan of treatment, by means of the very free exhibition of stimulants, more especially brandy, has been resorted to with great success. Reflecting instructively, as these cases

do, on one of the most important questions in the whole range of practical medicine, we hasten to bring their chief features before the attention of our readers. The series consists of eighteen cases ; and, as we cannot, of course, find space for the details of the whole, we shall content ourselves by recording, by way of example, the particulars of a few of the more interesting, and append to them a brief synopsis of the rest. The whole having occurred within the last few months, and several of them within a few weeks, they present, we believe, fair specimens of the form of fever lately and still prevalent in the metropolis. They do not, however, comprise all which have been under Dr. Todd's care during the time referred to, but only those of well-marked typhus type, and which agreed in presenting the following symptoms previous to the commencement of treatment : A copious eruption of scattered measles-like spots (mulberry or typhus rash ;) bowels either confined or but slightly relaxed ; great prostration of strength ; delirium (in six cases, coma was present ;) a small and very rapid pulse. It may be well to premise that they were treated as is done in almost all general hospitals in the open wards, their beds being purposely arranged so as to occur at some distance from each other, in order to prevent the accumulation of contagious emanations. The treatment pursued consisted in administering, either every hour or every half hour, day and night, from half an ounce to an ounce of brandy, with a draught every second hour, containing *sp. æth. chlorici* mins. *x*, *ammonia carbonatis* gr. *v* ; *aq. pur.* 3j. The patients were induced to drink as much strong beef-tea as possible ; the head was always shaved ; and, in most, a blister was applied to the scalp. We are indebted to the careful observations, noted daily by Mr. Maenamara, the clinical assistant in charge of the cases, for the whole of the particulars respecting them. The first to which we shall allude was a very severe attack, and happened to an elderly and unfavorable subject ; the beneficial effects of the alcoholic stimulant is strikingly shown, and there even appears some cause to infer the superiority of brandy over wine.

Elizabeth B., aged 70, was admitted June 16, 1853. She complained of severe headache, and of much pain in her limbs ; was very deaf, and could see but very indistinctly. Her daughter stated that the two latter symptoms had commenced four days previously, and the illness was of about a fortnight's duration, having begun

with aching pains in the limbs and head, and great prostration of strength, after four days, by several successive shivering fits. Pulse 122; tongue thickly furred.

R. Tinct. opii min. xx h. s. sumend.

R. Sp. am. arom. min. xx; aq. pur. ℥iss. 4tis horis sum.

18th. The skin of chest and abdomen is covered with an eruption of measly spots. The patient has been delirious during the night; her tongue is dry and furred; pulse 124; the bowels have acted but once since admission. Pt.

19th. Has been very delirious; pulse 126; other signs as before.

R. Am. carbon. gr. v; sp. æth. min. xv; aq. ℥iss. 3tis horis. Wine ℥viii per diem.

21st. Much worse; lies in an almost comatose condition, and allows her urine and feces to pass into the bed. Pulse 130. The head is to be shaved, and a blister applied. Instead of the wine, half an ounce of brandy is to be given every half hour.

Rep. mist.

22d. Pulse 124. The half-comatose condition still continues, and is only interrupted by low, muttering delirium.

23d. Pulse 120. The coma is passing off, and the delirium is less constant during its intermissions. The spots have now entirely disappeared from the skin. The patient takes her beef-tea much better than she did.

24th. Pulse 114. This morning the head symptoms are much less severe; and, on being questioned, the patient occasionally returns rational answers. The bowels act daily, but are not loose. To continue the same treatment.

25th. Pulse 96. The skin for the first time is moist. The patient states that she feels much better, and can be got to understand clearly where she is, which has not been the case on any previous occasion since her admission.

26th. Pulse 90. To take half an ounce of brandy every two hours.

From the last date she continued to improve. To aid her convalescence, quinia and other tonics were administered. She was discharged quite well, six weeks after admission.

In the next case, the progressive decrease in the frequency of the pulse subsequent to the employment of the stimulant was equally well marked as in the above. It occurred in a much younger subject.

James E., aged 18, began to feel ill on the 27th of June; and, on the 29th, was seized with shiverings, pains in the limbs, and great prostration of strength. He was admitted into the hospital on July 5; and, at that time, the skin was hot and dry, and covered with the typhus rash. The ocular conjunctiva of each eye was red and congested, and the tongue brown and furred. Pulse 112.

Ordered R. Am. carb. gr. v; aq. pur. 3iss; ter die. Beef-tea *ad libitum*.

July 6. Pulse 120. The bowels have acted once to-day. Delirium was present during the night.

Rep. mist.

7th. Pulse 124, very weak. The delirium has been so constant, that the nurse has found it impossible to induce him to take any nourishment. Rep. mist. The head is to be shaved, and half an ounce of brandy is to be administered every hour.

8th. Pulse 120, still very feeble. Bowels act daily.

9th. Pulse 112. The delirium is much abated, and the patient takes his beef-tea well.

11th. Pulse 100, much improvement. The brandy is to be continued.

12th. Pulse 92. For the first time the skin is moist and perspiring. From this date the patient gradually recovered.

At one time most of the members of an Irish family living in a dirty alley in the neighborhood were in the hospital together, all suffering from the same type of fever. The following case is that of one of the sons:

John C., aged 15, admitted June 28, having been seized on the 23d with shivering, pains in the limbs, prostration of strength, and severe purging. He had, at the time of admission, the usual symptoms of fever, was very restless, and at times slightly delirious. The bowels were not much relaxed; there was loud rhonchus heard over both lungs. Pulse 116, skin hot and dry. To drink beef-tea.

29th. Pulse 118, very feeble. The delirium is increased. Half an ounce of brandy every hour.

July 1. No improvement. Pulse 120 and very weak. The boy lies in a semi-comatose condition. Believing that the administration of the stimulant had not been well attended to, Dr. Todd, ordered a special nurse for the case, and directed that the brandy and beef-tea should be regularly given day and night.

2d. Pulse 100. The patient is less stupid, and seems to understand the questions which are put to him.

4th. Pulse 92. There is no delirium present. The tongue is much cleaned, and the respiration is unattended by any degree of rhonchus.

5th. Pulse 80. The skin is moist. The brandy is to be given every two hours.

8th. Is rapidly getting better. The brandy is discontinued, and two pints of porter per diem substituted for it. From this time the patient very quickly recovered.

Out of the whole eighteen cases, but one terminated fatally. The subject of it was very violently delirious on the day of her admission, and no account of her previous symptoms could be obtained. Death occurred on the third day afterwards. On making the autopsy, the brain was found to be slightly congested, and the gray matter was of a darker color than usual. Peyer's patches in the small intestines were enlarged and very distinct, but not ulcerated. The spleen was enlarged, full of blood, and very soft; but all the other organs appeared to be in a normal condition.

Excluding, then, this fatal case, we will now examine the condition of the circulation in the remaining 17, more especially with regard to the influence of the treatment upon it. On the day that the administration of brandy, &c. was commenced, the pulse had, in five cases, a frequency of 136 per minute; in three, of 126; in seven, of from 120 to 126; and in one, of 116. After the measures above specified had been pursued for four days, the pulse had, in eight cases fallen to 92; in five others, it had fallen below 92 on the fifth day; and, in the remaining four, to below 90 on the sixth. Again, taking the day on which treatment was commenced as our starting-point, the skin, previously hot and dry, relaxed, and became moist and perspirable, on the fifth day, in nine cases; on the sixth day, in five cases; on the twelfth day, in one case; and in the remaining two the date of this crisis was not recorded.

The degree of success exhibited by the above facts is, we suspect, very considerably beyond that usually obtained in cases of so severe a type as those under consideration, and is very encouraging to a pursuance of a similar plan of treatment in future. That the success did really depend on the treatment, appeared to be conclusively evidenced in several cases, in which the pulse, progressively increasing in frequency up to the time that the brandy was ordered, steadily

fell from that day afterwards. The relapses of one or two, in consequence of the accidentally inefficient administration of the remedy, also afford important support to the same conclusion. In respect to the numerical age of the fever at which the brandy treatment was commenced, it varied so much in the different cases, that there does not appear to be any practical advantage in attempting to state it. In all, however, the first stage had passed, and low "typhus" symptoms had become fully developed. Dr. Todd is continuing the same plan of treatment on the fever patients now under his care, and hitherto with very pleasing results. We shall probably return to the subject at some future time.—*Med. Times and Gaz.*, Aug. 27, 1853.

ART. III.—*The Relation of the Appearances in the Urine to Disease of the Kidney.*

There is, in *Virchows Archiv.* v. 199, an interesting paper on this subject, by C. E. L. MEYER. Dr. M. attempts, by careful examination of the urine during life, and of the kidney after death, to resolve the following questions:

1. In cases of mere catarrhal or fibrinous inflammation of the kidney, does the urine present appearances similar to those which occur in the more serious structural degeneration commonly called Bright's disease?

2. Can the first-named slighter inflammatory affections of the kidneys be detected during life, in the course of other diseases, by an examination of the urine, with the same frequency as they are found to have existed by inspection after death?

3. If the first question is to be answered in the affirmative, is there any possibility of distinguishing, in examination of the urine, between the changes induced upon it by the slighter, and by the more serious cases above mentioned?

The importance of these questions must at once be understood; and, in fact, we fancy that most practical men have already revolved them in their minds; for how often does it happen, in cases of scarlatinous dropsy, for example, that we observe the urine turbid, bloody, or albuminous, or pale, moss-water like, and also albuminous; in fact, presenting derangements much more remarkable than those accompanying many cases of incurable Bright's disease, and yet the patient, in the course of a week or two, restored to health, with sound kidneys, and urine perfectly natural?

In reply to the first question, our author concludes that, even in the slightest forms of inflammatory affections of the kidney, occurring in the course of other diseases, the urine is found to contain albumen and plastic coagula from the tubuli uriniferi, the latter of course to be detected in the fluid by the aid of the microscope; in fact, that there exists no case of such renal inflammation, without the consequent appearance of these coagula in the urine.

With regard to the information which may be gathered from the appearance of these casts of the urinary tubules, as to the actual condition of the kidneys, he finds that the greater their consistence and refractive power, and the less their solubility in muriatic acid, the more intense is the inflammatory action; while the greater their number, the more widely is it spread over the organ; but there is no constant relation between the quantity of albumen in the urine as displayed by the usual tests, and the number of these casts.

The simpler inflammatory affections of the kidney may be of very short duration, the organ being very rapidly restored to health, or, on the other hand, they may last very long, and yet without inducing any deep-seated degeneration; and the answer to the third question above stated thus becomes most important. After a full examination of the point, our author comes to the conclusion that while, by the examination of the urine, we may generally distinguish between acute and chronic renal disease—the former giving rise more frequently to the appearance of blood and of small albuminous masses in the urine—we have no certain mode of distinguishing between chronic cases of renal catarrh or simple inflammation, and chronic cases of deep-seated Bright's disease. We are thus left to gather from the general symptoms the information which the simple examination of the urine will not yield us, and to study the condition of the patient with respect to anæmia, dropsy, vital power, duration of the disease, etc., before coming to a conclusion.

Here we are reminded of the great principle which we endeavored to inculcate in our introductory article on microscopical discovery and its use in practical medicine, that all special means of investigation, whether by the stethoscope, the test-tube, or the lens, are always by the good and safe physician held in due subordination to the great radical principles of our science, and thus only can they be considered as more than a delusive *ignis fatuus* by the bedside.—*Assoc. Med. Jour.*, Aug. 5, 1853.

SURGERY.

ART. IV.—*Entire Resection of both Superior Maxillary Bones.*

The complete extirpation of both superior maxillary bones has been twice performed by HEYFELDER.

CASE I. A Schmidt, aged 25, came to the Clinique, June 13, 1843, suffering from a tumour of the face, which, from his account, had commenced a year ago, in the posterior part of the palate, and had gradually involved both superior maxillary bones. The nose was pushed upwards, and flattened; the palatine arch was depressed towards the tongue; the face was affected with œdematous swelling; both respiration and deglutition were impaired, speech was embarrassed, and sleep broken. The teeth, though loosened, were sound; only two incisors were wanting. The tumour appeared everywhere hard, uneven, and insensible to the touch, and did not pass beyond the boundaries of the superior maxillary bones. The constitution was good; lancinating pains had been felt in the tumour only during the last few weeks.

Dr. Heyfelder concluded that the tumour was of an indolent malignant character, and that the only remedy consisted in the entire removal of both maxillary bones. The operation was performed June 23, 1844. The patient being seated in a chair, the head resting against the chest of an assistant, two incisions were made from the external angles of the eyes to the labial commissures, and the included parts were reflected upwards to the internal angles of the eyes, and to the ossa nasi. The flap, thus formed, was raised towards the forehead, until the infra-orbital ridge was exposed. Then the chain-saw of Jeffray was passed through the sphenomaxillary fissures, and the malar bones were divided; the maxillæ were next separated from the ossa nasi; the vomer and the thinner bones were cut with strong scissors; after which a chisel, applied with moderate force to the superior part of the tumour, was sufficient to effect its separation. The accessions of syncope prolonged the operation, which, however, did not last longer than three-quarters of an hour. Very little blood was lost; torsion and compression sufficed to arrest the hemorrhage. Two hours afterwards, the edges of the wounds, from the angles of the eyes to the corners of the mouth, were united by twenty-six points of suture, and cold lotions were

applied; there was no reaction nor swelling; the patient could swallow water and broth. Four days after the operation, it was remarked that the wounds had become almost entirely united by first intention. In six weeks, the patient was presented at the Physico-Medical Society of Erlangen, and on August 25, he was discharged.

The following was his condition: There was no deformity of the features; in the mouth, there was seen along the median line a fissure thirteen lines long and three lines broad; the extirpated parts had been replaced by the tissue of a cicatrix, firm and solid at the circumference, but somewhat softer near the fissure; the soft palate and the uvula were in their natural place; deglutition was free and the tongue in a better state than formerly; the nose had resumed its usual form and direction; the face, which, before the operation, was monkey-like, once again possessed a human expression.

The microscopical examination of the tumour showed that it was of a cancerous nature. Six months afterwards, the patient, in good health, went to work in the fields; but in the summer of 1855, Dr. Heyfelder was informed that another tumour was forming in the forehead.

CASE II. Martin Loehner, aged 55, was affected in the upper lip, twelve years ago, with a cancerous growth, which was operated upon three years after its appearance. For two years there was no return; but, subsequently, a small tumour developed itself near the cicatrix, approached the nose, and excited violent pains. Soon a cancerous ulcer formed, which extended over the right half of the upper lip, the ala nasi, and the palate. The patient came into the hospital Jan. 21, 1850, in the following state: A horrible cancerous ulcer, commencing at the right commissure of the mouth, occupies the greater part of the upper lip, and has destroyed both the right ala and the septum nasi. All the parts were covered with painful, bleeding, fungous growths. The palatine arch was converted into an irregular, knobbed, cancerous mass; most of the teeth were lost; an offensive secretion was constantly flowing, and the patient was thinned and worn out.

The operation was performed January 24. Two incisions were made, exactly as in the preceding case. The chain-saw was used to separate the left os malæ, and Liston's bone forceps to divide the right. The remains of the septum nasi and the vomer were cut with strong scissors. A considerable quantity of the soft parts was likewise taken away. The bleeding was easily arrested, and the wounds

were united as well as possible by suture. The patient was fed by a syringe. The left coronary artery bled three hours after the operation, but it was easily tied. The case went on well; and, on February 18, when the patient was presented at the Physico-Medical Society, the following was his condition: The greater part of the wounds were united; but a deficiency existed in the face, corresponding to the disease, at the superior part of which were seen the vertical portion of the ethmoid, and the two ethmo-turbinal bones. In the velum palati there was an opening, two centimetres wide. The destruction of the lip and of the nose produced on the right side a triangular opening, the base of which corresponded to the mouth, and the superior angle to the root of the nose.

He can take liquid food, but his speech is unintelligible; but, when the opening in the palate is closed by the sponge, he can make himself understood. Autoplastic operations were unadvisable, from the exhausted condition of the man.—*Med. Times and Gaz.*, July 30, from *Rev. Medico-Chirurgicale de Paris*, 1853.

ART. V.—*A New Form Dofirector for the Remedy of Stricture by External Incision.* By PROF. SYME.

Having performed the external incision in eighty cases of obstinate stricture, without hemorrhage, extravasation of urine, or other fatal consequence, I think the most determined opponent to this procedure will hardly venture to plead the danger attending it as an argument against the operation. With such overwhelming evidence of its safety, there can be no doubt that, if bad results do ever occur, they ought to be ascribed, not to the operation, but to the operator. The other great objection was the alleged want of permanence in the good effect obtained; and it is quite true that in some of my earlier cases, although there was complete relief in every instance at first, the disease did afterwards return. But I have long been satisfied, and have repeatedly explained, that the relapse on such occasions could be fully accounted for by the incision not being sufficiently free for dividing the whole extent of the contracted part of the canal; and I have now to propose a modification of the apparatus, which seems to promise a great degree of security, if not absolute certainty, in accomplishing this essential part of the process.

So long as an instrument employed to explore the urethra does

not pass through the stricture, it distinctly determines the seat of obstruction ; but so soon as its point gets fairly beyond the contraction, unless there should be a perceptible thickening of the canal, which seldom occurs except in its anterior part before the scrotum, there is no longer any trace of the stricture that can be detected by the most careful examination, even after the coverings of the urethra have been divided. Hence no doubt the long cherished, and still not entirely abandoned, errors, in regard to the situation of strictures, and especially the mischievous delusion of their occurring at the "neck of the bladder," in the membranous portion of the urethra, or at any point behind the bulb. Hence also the difficulty which has been experienced in passing catheters, after it seemed that the stricture was freely divided ; and hence also, no doubt, the imperfect results of some operations performed by myself and others.

Having long experienced the inconvenience attending this uncertainty, as to the precise seat of the stricture at the time of operation, I tried the effect of slipping a piece of elastic catheter over the director, so as to leave it exposed three inches from the point, and thence covered up to the handle. As this contrivance was found to answer the purpose in view completely, I had a solid steel director made of the same form, and I may now explain the mode of using it. The slender part having been passed through the contracted part of the canal, the director is confided to an assistant, who keeps it steadily pressed down upon the stricture with one hand, while he holds up the scrotum and penis with the other. The operator then cuts through the integuments and subjacent textures until he distinctly feels the guiding instrument, when, ascertaining at once where the stricture is seated, he inserts his knife in the groove at least an inch below the thick part, runs it forward to the termination, and then, taking the director in his left hand, withdraws it, together with the knife, still held at the extremity of the groove, so as to divide the strictured part completely, which is shown by the thick portion of the instrument freely passing the seat of its previous obstruction, when urged towards the bladder. If the operation has been properly performed, the catheter is then passed with the same facility as in a perfectly sound urethra. During the two months that have elapsed since the adoption of this contrivance, I have employed it in six cases, of which the leading particulars may now be stated.

The first case was that of a clergyman, who had suffered from the disease for a long series of years, without being aware of its nature.

He had been obliged to relinquish his ministerial charge, and, although possessed of talents and acquirements of a high order, was thus compelled to pass his days in retirement without the consolation of hope, and with no occupation except endurance of the distressing and constantly increasing symptoms of the complaint. At length complete retention of urine requiring the use of instruments led to detection of the stricture, and he then became desirous of placing himself under my care, in compliance with the advice of his surgeon in the country. The "*res angusta*" attendant upon the interruption of professional duty for a long while prevented this step from being taken. But having become acquainted with his case through my friend Dr. John Taylor, I offered a private room in the hospital, which was readily accepted by the patient, whom I accordingly admitted on the 5th of May last. The stricture was anterior to the bulb, and very tight. I succeeded in passing a small bougie through it, and followed this by one or two of a larger size, but without affording the slightest alleviation of suffering, and therefore, on the 23d, proceeded to divide the stricture. This was done freely, full an inch and a half of the urethra being laid open; and as the No. 8 catheter, afterwards introduced, occasioned no inconvenience, it was allowed to remain three days. On the 28th, the urine passed in a full stream by the urethra, without a drop escaping by the wound, which was almost healed; and on the 31st, that is, exactly a week after the operation, I met the patient walking in the open air, perfectly well. Since this worthy man returned home, he has sent Dr. Taylor such striking statements of the relief thus quickly experienced from protracted and hopeless suffering, as I would gladly insert, if they were not so overflowing with the thankful effusions of a grateful heart.

The second case was that of a man, 48 years of age, who came from Newcastle-on-Tyne, and was admitted on the 6th June. He had been two months in the hospital there some time before, without obtaining either complete or permanent relief, and was anxious to have the stricture divided. The operation was performed on the 9th, the stricture being anterior to the bulb. On the 20th, he was walking about the ward, making water in a full stream, and discharging none by the wound, which was nearly healed. On the 24th, the wound was quite healed, and the patient declared that he made water better than he had done for fifteen years. On the 30th, he returned to Newcastle.

The third case was that of Captain ———, who came from Dublin on account of a stricture, which presented the irritable and contractile character, and had derived no benefit from dilatation, which indeed aggravated instead of relieving the symptoms. To satisfy myself upon this point, I introduced a small bougie, without causing the slightest pain or bleeding, but with the effect of inducing an attack of complete retention of urine. I then readily complied with the patient's desire to have the stricture divided. The operation was performed on the 12th of June, and on the 16th of July Captain ——— returned to Dublin in every respect perfectly well.

The fourth case was that of P. M'A., aged 60, admitted into the Royal Infirmary on the 3d of May last, suffering from the consequences of stricture, under which he had labored for more than thirty years. Abscesses had formed in the perineum, and, communicating with the urethra, without a free opening externally, allowed the urine to cause painful and dangerous distentions of the scrotum and neighboring parts. By means of an ample incision in the middle line of the perineum, I afforded relief from the most urgent symptoms, and then proceeded to remedy the contracted state of the canal. There was a very tight stricture just before the scrotum, about two inches and a half from the orifice, and another anterior to the bulb, the intermediate portion of the passage being irregular and thickened in its walls. It was not until after many ineffectual attempts that I succeeded in passing a small bougie fairly into the bladder, and then the repeated introduction produced no beneficial change in the disease, which continued to render micturition extremely painful, and so difficult that it was accomplished imperfectly, and only by straining at stool. I therefore resolved to divide the whole contracted part of the urethra, in compliance with the patient's request. On the 20th of June, I introduced the guiding director so far as the anterior stricture permitted, then exposed the groove anterior to the bulb, and there inserting the knife, ran it forwards until obstructed by the notch in the thick part, when both instruments were withdrawn together, sufficiently for the complete division of the remaining contraction. A No. 8 catheter was retained in the bladder for three days; and I beg the reader's particular attention to what followed. Although the urethra had been laid open to the extent of *three* inches, the hospital report states, that on the 24th (four days after the operation) the patient had not had a bad symptom, and passed his water half by the urethra, half by the wound.

And on the 30th (ten days after the operation) it says, "Passed all his water by the urethra this morning; is quite well; wound nearly healed." He returned home on the 12th of July, in every respect enjoying the most perfect health, and entirely free from any vestige of urinary uneasiness.

The fifth case was that of a gentleman from Jamaica, where he had long suffered from stricture. Five years ago, he had repaired to London for relief from the disease without being aware of its existence; and as the eminent physician to whom he applied made no inquiry on the subject, he returned to the West Indies with abundance of prescriptions for correcting the secretion of urine, and allaying urinary irritation, but without having had anything done to remove the cause of disorder. On going home, he had the stricture detected, and was treated for it by bougies so ineffectually, that he submitted to the external incision, which was performed by a surgeon who had employed this operation with great success in some cases of the most obstinate character. The relief anticipated, however, was not obtained, and when the wound at length healed, after an irksome confinement of more than four months, the symptoms were nowise alleviated. The patient then resolved to cross the Atlantic a second time, but instead of proceeding again to London, directed his course to Edinburgh. On examination, I found that the stricture lay immediately below the scrotum, and coupling this rather unusual situation with the slowness of the wound to heal, I felt satisfied that the failure of the operation had resulted from the stricture not having been fully divided. The urine was so turbid and loaded with mucus, that the patient feared there was some disease of the kidneys or bladder; but having so often seen such symptoms existing as the effects of stricture, and disappearing upon its removal, I did not hesitate to advise another incision. It was performed on the 14th of June, with the most perfect success, and the patient departed for London on the 6th of July, without any remains of his long and troublesome complaint. This case seems to illustrate two very important points in the treatment of stricture. The first of these is, the inadequacy of incision to afford complete or permanent relief, unless it extends through the whole extent of the contracted part of the canal. If this gentleman had not applied to me, his case would doubtless have been regarded as a proof that external incision was not always sufficient for the remedy of stricture. In the second place, the long period that elapsed the first operation before the

wound closed, shows the bad effect of opening the urethra behind a stricture. There are indeed few more dangerous wounds than one so circumstanced; and it is difficult to credit the astounding reports that reach us of London hospital surgeons intentionally taking such liberties with the human frame, as an advantageous substitute for my operation. In the event of any more unfortunate people falling victims to this preposterous procedure, I hope the coroner of Middlesex will afford an opportunity of testifying as to the operator's claims for a free passage to Western Australia.

The sixth case was that of a patient, 77 years of age, who had been twice the subject of operation by M. Reybard, on whom the Parisian Academy of Medicine conferred a prize of L.500 for adopting the plan of internal incision for the remedy of stricture. This gentleman wrote to me from the south of France, stating that after suffering profuse hemorrhage, intolerable pain, and prolonged treatment under the care of Mr. Reybard at two different periods, seven years and two years ago, he felt so tormented by the disease, that he would willingly place himself under my care, if I could hold out any prospect of comfort for the remainder of his days. He was satisfied with my reply, and undertaking his long journey of 1200 miles, passed safely through Paris and London, and arrived here on the 2d of July. I performed the operation on the 5th, and by the end of a week he was restored to perfect health, which, judging from his sound and healthy aspect, he promises to enjoy for many years to come.—*Monthly Journal*.

ART. VI.—*Collodion for Erections accompanying Blennorrhagia*. By
DR. DORINGER.

In the *Med. Central Zeitung*, there is reported a case of a rather curious application of collodion for gonorrheal erections, and the result was such as we would like to see borne out by other cases: A young man, aged 28, was attacked for the third time with a blennorrhagia, which was accompanied by such severe and painful erections, that the patient could hardly stay in bed for an hour. After having tried without avail both camphor and narcotics, Dr. Doringer ordered cold fomentations, and when the penis had resumed its natural size, the application over its whole extent, even including its prostatic portion, with a strong coating of collodion. This had the desired effect, for from that moment the patient had no erection,

and suffered only from a slight scalding in passing urine. What proves that the amelioration was really due to the means employed, is that on the morrow, the collodion being taken off, the erections returned, but not so severely, and again ceased on the application of a fresh coating of collodion.—*Dub. Med. Press*, June 29, 1853.

ART. VII.—*Early Operation for Hair-lip.*

ANDREW NOLAN records (*Dub. Med. Press*, June 2, 1853) a case of operation for single hare-lip on an infant six hours after birth. The child did not seem to suffer very much after the operation was complete, and took drink, apparently without suffering, next day. The lower needle was removed in sixty hours, and the upper in seventy-two. Union was perfect.

MATERIA MEDICA.

ART. VIII.—*Administration of Ether in Capsules.*

In the *Journal de Médecine et de Chirurgie Pratiques* for April, 1853, M. Clerton, of Dijon, states that he has for some time been accustomed to give ether in capsules in nervous affections. After several years of observation, by himself and others, he concludes that ether, when introduced in a known dose, pure, and without loss, into the stomach, has an effect which was totally unknown until the preparation of the ether-pearls (*perles d'ether.*) According to the old plan, the ether became partly volatilized before passing half way down the œsophagus; and what arrived in the stomach was dissolved in water, and in a state favorable to rapid and sudden volatilization. M. Clerton has several times seen neuralgia, hemicrania, and gastralgia, arrested instantaneously by from one to three of these capsules; while ether draughts, and ether in syrup, had been largely given without any effect.

The editor of the *Union Médicale* for April 12th, in noticing M. Clerton's preparation, states that the ether capsules are already employed extensively by M. Trousseau, M. Pidoux, and other practitioners in Paris. The advantages of the capsules are :

1. The ether can be administered in a known dose—each capsule containing four or five drops.
 2. The capsules are inodorous; so that ether can, without their knowledge, be given to persons to whom its smell is repulsive.
 3. The capsules permit neither evaporation nor decomposition of the ether; they may be kept a year at least, or indefinitely, according to M. Clertan.
 4. The ether arrives in the stomach without irritating the membrane of the mouth or pharynx, or producing cough; and it produces its sedative action by its rapid absorption.
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PART FOURTH.

BIBLIOGRAPHICAL NOTICES AND REVIEWS.

1. *Hallucinations or the Rational History of Apparitions, Visions, Dreams, Ecstasy, Magnetism and Somnambulism.* By A. BRIERRE DE BOISMONT, Docteur en Medicine de la Faculte de Paris, etc., etc., etc. First American from the Second Enlarged and Improved Paris, Edition 8 vol. pp. 553. Lindsay & Blakiston, Philadelphia, 1853.

The subject of hallucinations is one of universal interest. While multitudes of persons in every country and age of the world have been subjects of curious forms of hallucination, the nature of its mysterious phenomena have never been fully investigated. Formerly ghosts and apparitions were matters of daily occurrence in the experience of those strong in the belief of their existence, and although at the present day their existence is denied by all enlightened people, nevertheless hallucinations in other forms are as prevalent as at any other period. Advancing science has checked the reign of *Ghosts and Hobgoblins* it is true, but in their place the shadow is taken for the substance or rather the civilized world over, *fancy* is taken for *reality*. It is a curious subject. To see what no eye perceives, to hear what no ear hears, to be convinced of the reality of sensations to which all are incredulous, does not this present matter for research full of interest?

Waving further remarks, we proceed to give the plan of the work in the language of the author. This we think will be more accept-

able to our readers, "These preliminaries established (pages 23 to 26) elsewhere spoken."

We would be glad to notice the book further, and quote more largely from it, but our limits will not permit. We think we may safely commend the work to the consideration of our readers.

"These preliminaries established, we proceed to give the general arrangement of our work:—

"The definition of hallucination should precede its history; with that, therefore, the book commences. It has been argued that it would be more logical to begin by the method of analysis and synthesis; but that would require tortuous paths; we prefer the one which at once gives a clear idea of the question.

"If hallucination were a simple fact, its classification would not require such enlarged development; but it is far from being so. This particular state of the mind is seen under a multitude of aspects. It exists with reason, it constitutes a variety in madness; frequently, strange metamorphoses of feeling mask it completely. Almost always it accompanies alienation, of which it is then but a symptom. It exists in nightmare, in dreams, in ecstasies; certain nervous diseases, such as epilepsy, hysteria, hypochondria, are also frequently united with it; indeed, it is likewise observed in many inflammatory, chronic, and other affections. This multiplicity of forms has led us to establish *ten sections*.

"The *first* is devoted to hallucinations compatible with reason. The facts which are cited, indisputably establish the fact that the reproduction of cerebral images can take place without derangement of the intellectual faculties; they will serve hereafter to explain the hallucinations of celebrated men falsely accused of madness.

"The *second* section comprises simple hallucinations, but stamped with the character of alienation. Individuals are persuaded that they see, hear, smell, taste, and handle things that are impalpable to the senses of those about them. These false sensations exist even in the absence of the senses. Thus, the blind say that they see angels and devils. The deaf recite conversations they have heard. The hallucinations may be isolated, or several may be combined; they can affect all the senses.

"In the *third* section are collected the hallucinations that are mingled with another error of the senses, to which the name of *illusion* is given. In the first instance, vision occurred without an object; in the second, it is always produced by a real body, but

which gives a different impression from reality; a man becomes a woman, a piece of wood, a frightful monster. Illusions sometimes appear as an epidemic; and such are not rare in history. Each sense may be the seat of the illusion, or all may be at once affected. In more than one instance, illusions have caused offensive and dangerous acts.

“Hallucinations are above all frequent in madness; the *fourth* section embraces those which are observable in monomania, and the other varieties of alienation. The forms of delirium which most frequently exhibit this complication are melancholy, delirium tremens, demonomania, erotomania, nostalgia, etc. A variety of demonomania formerly played a prominent part; those who were attacked by it imagined that they had dealings with demons, whom they called Incubes and Succubes. To this section is also related that which manifests itself by stupidity. Confounded with imbecility, successively classed with several kinds of madness, there is no doubt that this state now and then is accompanied by errors in the senses, the existence of which is not proved until after the recovery of the patient, and which gives a reason for acts otherwise inexplicable, and only to be accounted for by hallucinations.

The fourth section also includes hallucinations that accompany mania; they are often associated with illusions, or alternate with them. Their frequency is almost as great as in monomania, but it is often more difficult to detect them, because maniacs pass from one object to another, are capricious, reply with volubility, and pay no attention to the questions addressed to them. There is a variety of this mania with lying-in women, which is observed in many cases. A fact which is more rare, but which we have likewise noted, is the persistence of this symptom in the last stage of general paralysis. It is probable that hallucinations exist in some degrees of imbecility.

“Hallucinations which are exhibited in delirium tremens, drunkenness, after the absorption of narcotics and poisons, are the subjects of the *fifth* section; we have thought it proper to separate alienation from mental hallucinations, which, linked with the action of these substances, do not really show themselves with the characters of madness, and we have chosen to speak of them under the article Etiology. Delirium tremens, as well as madness from inebriety, has a great influence on the conduct; we have examined each under the triple relation of morality, medicine, and law.

"The *sixth* section comprises hallucinations connected with catalepsy, epilepsy, hysteria, hypochondria, etc.

"The hallucinations of nightmare and dreams constitute the *seventh* section. It is evident that nightmare has points of relation with madness, which are observable in that state. There are also dreams, which are closely analogous to hallucinations. The physiological study of dreams has presented many interesting particulars; it is thus, for instance, that presentiments appear to us explainable in most cases by hallucinations. It must not, however, be thought that presentiments occur only in dreams, and that hallucination always explains them. One case of nocturnal hallucination which is related in this section may throw some light on actions frequently inexplicable. Indeed, we have proved that nocturnal hallucinations have sometimes existed as an epidemic.

"There is a singular state of the mind known under the term *ecstasy*, the phenomena of which have justly attracted the researches of observers. The hallucinations which are one of its distinctive characteristics have induced us to form it into an *eighth* section. Prolonged concentration of thought on one object is terminated by an ecstatic state of the brain, in which the object is reproduced, and affects the mind as if it were really perceived by the eyes of the body. With this state of the mind may be classed the visions of celebrated men. Their hallucinations had often no influence on their reason, particularly when they were united to the general belief of the time, and when they occurred during the ecstasy that we have termed physiological. Ecstasy has several times been noticed in children; in catalepsy, hysteria, overwrought mysticism, and mental alienation.

"Certain special phenomena, such as promonition, clairvoyances second-sight, magnetism, and somnambulism, appear to us related to ecstasy. The effect of cold has also occasioned this nervous state. Ecstasy has been observed in all climates; and even lately has appeared among several thousand persons in Sweden. The hallucinations observed in these different nervous states, and especially in somnambulism, may cause acts involving great responsibility.

"The *ninth* section of the classification comprehends febrile complaints, acute, chronic, and other inflammations, and certain atmospheric states. Amongst the diseases in which this symptom has been most frequent, we will notice acute delirium, which has been observed in madhouses, fever, attacks of the brain, parenchymatous

inflammations, typhus and typhoid fevers, intermittent fevers, gout, chlorosis, pellagra, hectic diseases, syncope, asphyxia, lethargy, convalescence, etc. Atmospheric influences appear to have frequently caused this symptom.

"Finally, in the *last* section we have exhibited the hallucinations and epidemic illusions of which we have elsewhere spoken."

2. *A Practical Treatise on Diseases of Children.* By J. FORSYTH MEIGS, M. D., Second Edition, Revised and Enlarged. Phila. Lindsay & Blackiston, 1853—8 vo., pp. 711.

This very much enlarged edition is a decided improvement of this excellent work. The style, unlike that of his father (C. D. MEIGS,) is free from pedantry and affectation, although wanting in conciseness, while the descriptions of disease are accurately drawn, and the treatment, for the most part, remarkably judicious. We are pleased to find the writer employing the numerical method of demonstration, whenever the subject will admit of it, which gives far greater accuracy and precision to medical observation than the method pursued by the older writers, who merely stated their own generalizations, instead of giving the facts on which these generalizations were founded, thus allowing the reader to judge for himself of their probable truth and correctness. All medical essays of much value or authority will hereafter be based on the same method, to the exclusion of those loose and indefinite statements, which generally characterize medical works. The profession of America are under great obligations to Prof. AUSTIN FLINT, of Buffalo, for furnishing the best models, and demonstrating the great advantages of the numerical method in medicine, and those who may hereafter aim to instruct on medical subjects, or rival his fame, will have to follow the same superior method.

The principal changes and additions that have been made in the present edition, the author states to be as follows: An introductory essay of over 30 pages, upon the clinical examination of children, has been inserted; the articles on croup, bronchitis and pneumonia have been re-written, and the results obtained from the observation of a large number of additional cases have been made use of. The subject of tracheotomy in croup has been freely discussed. A very full article on atelectasis, or imperfect expansion of the lungs, has

been added, and the new doctrines in regard to it, been applied in the articles on bronchitis and pneumonia. The article on scarlet fever has been re-written, and the results of over one hundred new cases been added to those contained in the first edition. Lastly, over one hundred pages of new matter have been added on diseases of the skin; altogether forming one of the most complete and satisfactory works on the diseases of children which has yet appeared in the English language.

3.—THE MICROSCOPIST, or a complete manuel on the use of the MICROSCOPE, for Physicians and Students, and all Lovers of National Science. Second Edition, Improved and Enlarged, with Illustrations. By JOSEPH H. WYTHES, M. D., 12 mo. pp. 212, Lindsay & Blackiston, Philadelphia, 1853.

In a former number of the Journal we gave the first edition of this work a favorable notice. We are glad to know that the profession has received it cordially and that it met with a speedy sale. The present edition is a decided improvement upon the former. With the present rage for microscopical pursuits it will certainly receive a cordial welcome by the profession, and as it will facilitate those pursuits we take pleasure in commending it to the consideration of our readers.

PART FIFTH.

EDITORIAL AND MISCELLANY.

Medical Colleges.

Our able cotemporary, the *Buffalo Medical Journal*, for November, contains some very judicious remarks on Medical Colleges and Medical Teaching, from the pen of its respected editor, Prof. FLINT. We fully agree in the opinion that the complaints against our medical schools are, for the most part, unfounded, and that our present educational system, having free competition for its basis, and resting on the good will of the profession, is the one best adapted to the situation and wants of the country. We have watched the establishment

and management of schools depending on government patronage, and we have had opportunities of knowing something of the manner in which medicine is taught in these institutions, and of the position they occupy in public opinion, and we do not hesitate to pronounce them, thus far, decided failures, altogether unsuited to our political institutions, placed as their faculties are above the reach of those motives and stimulants for exertion, which actuate other teachers. We have seen men selected, in such schools, merely from political motives, because they had done good service as party hacks and unscrupulous politicians, to teach branches of science they had never studied, and when elected they have sunk down into a state of very comfortable torpor, under the anaesthetic influence of regular salaries promptly paid, and beyond the reach of all contingency of numbers. We hold that the government system is unsuccessful even in Europe, where social organization and political systems are wholly diverse from our own, but where, if under any circumstances, such a system would be likely to succeed. At Oxford, for example, there are two or three medical professors supported by the State, or by endowment from private bequests, and they rarely have as many as half a dozen students attending their lectures. The cheapness of subjects in Paris, and the great attractions of that city, with its numerous and well managed hospitals, draw together great numbers of students, but the same would happen if the professors were paid by their classes instead of the government. As it is, probably as many students annually assemble at the different schools of Philadelphia, as are to be found in the city of Paris. But when it is attempted to establish a government medical school in a small inland country town, away from hospitals, and all opportunities of clinical teaching, paying the professors fixed salaries, whatever may be the number of their students, it requires no great foresight to see that such schools must very imperfectly subserve the objects for which they were established, and that the sooner they are abandoned the better it will be for the interests of medical science. Elected by political influence, the professors hold their offices by the feeble tenure of party supremacy, and when a political change occurs, they are liable to be superceded by another set of political adventurers, who, in their turn, experience the anaesthetic influence of government pay. Besides, the salaries are too small to command men of first-rate talent, for no physician of much eminence would bury him-

self in a government school, even to gain the title of *Professor*, with an annual income of one thousand dollars only.

We also agree with Prof. FLINT in the opinion that the opening of free schools of medicine would have little tendency to improve the character of the profession; and we go still further, and say that nothing would more certainly tend to degrade its character than this. We have now free colleges and others next to free, and what is the character of the graduates who annually go forth from these schools to practice the healing art? Are they not often such as are wholly unfit to make a respectable living in any other calling? Young men too lazy to follow the plow, and too stupid to excel in any other profession, resort to these quack manufactories, where they go through the miserable farce of listening to still more stupid teachers, only to be let loose on the community—a set of ill-mannered, charity-empirics, who may be tracked through life by the disgrace which they bring upon an honorable calling. The ranks of quackery, we doubt not, are constantly replenished from such schools as these. To reduce the fees for lectures below a remunerating standard, thus depreciating the value of medical instruction, and inviting into the profession the half-educated, the indolent, those who have failed in other pursuits, who are unable to gain a decent support by any other calling, too stupid for the bar or the pulpit—those who are quacks by nature, and wish the shield of a diploma to cover their charlatanism;—this is what some consider the proper mode of elevating the profession, and raising the standard of medical education. We acknowledge that in one point the faculties of these cheap schools are in the right, they seem to have a just estimate of the value of their instruction, and if, instead of half a fee, their teaching was wholly gratuitous, the profession would agree that, if they lacked other acquirements, they had attained a very satisfactory amount of *self-knowledge*. We have a very poor opinion of medical charity scholars, and when we see a young man, willing to accept these proffered advantages, generally delusive, without pay, or at a nominal fee, we look upon him as lacking in self-respect, that sentiment of manly pride and independence which chooses to pay for what is worth paying for, and to work his way honestly by the proceeds of his own labor.

The west as well as the east is becoming flooded with half-educated young men, graduates of Eclectic, Homœopathic, Reformed schools, (so called, which need reforming,) State schools, and half-pay

schools, and a majority of them turn out arrant quacks sooner or later, while well educated men, of real acquirement and approved skill, are thrust aside by the artifices of these knaves, and the community suffer in consequence. Let free competition prevail in medical teaching, but let it be fair and honorable. Let it be deemed as dishonorable to reduce the fees for lectures below a just remunerating point, as it is for a private practitioner to reduce his charges below the established tariff, and underbid his competitors. Let the States which have entered the race of competition with private enterprise, abandon the field, and adapt their legislation in accordance with the spirit of our institutions, which are hostile to monopolies, and governmental appointments, and leave medical education where it should be left, in the hands of the profession itself. Were it possible to avoid political and partizan influence in making the appointments in State institutions, which it is not, yet the fact, that the professors are not dependent on the respect and good will of the profession, but are secure of support, however remiss or negligent in the discharge of their duties, is sufficient to show the impolicy of such a system of medical education, while it is amply confirmed by past experience.

"Traveling Doctors."

We introduce the following because it is rather *rich*. We presume our friend PARKER has not been guilty of lending his name knowingly to a charlatan; but other good men have sometimes unwittingly done so, and have paid a most mortifying price for their imprudence. We think our *great lights* in the profession cannot be too cautious how they lend their names to men who are not thoroughly tried:

"Dr. J. F. D., of Portland, Maine, scores with delectable severity Dr. Hartly, of the Ear Infirmary of Philadelphia, in a letter to the Boston Med. Journal of the 7th ult. Hartly goes from Philadelphia to Portland, and in a flaming advertisement in the Portland dailies, headed by the imposing caption, "Important to the Deaf," and ended by a number of certificates, borrowed, manifestly from the Western method of advertising a jackass, which always commences with "Important to Farmers," and ends with certificates of "pedigree

and performance" of the ass aforesaid. Among the certificates we find the name of that universal referee of quacks, mountebanks and inventors in general, VALENTINE MOTT, M. D., the celebrated Emeritus Professor.* This name makes the light of the pictures, while Willard Parker, M. D., and John B. Whitaker, M. D., constitutes the shade. And with this stock in trade the ear doctor travels from city to city, making large promises of "better means" than stay at home doctors have, to which "the most confirmed and obstinate cases yield," as is testified by "the most distinguished medical men of the country." Mott certainly *is* distinguished and his right and left bowers in this quack advertisement promise to fill as unenviable a space as their mentor. As the jackass model has been adopted for such handbills, we suggest with all proper deference and respect that it be extended to the frame work of the certificates, and the following, which we really copied from a Kentucky donkey advertisement we offer to the consideration of certifying doctors as a model:

"I John Dempsy do hereby certify that Rocky Mountain if he aint good looking, is a screamer for colts, which is bigger in gineral than the ginerality of colts, and long ears and not much light under their bellies and as sure as shootin.' In the case of a traveling doctor it would be well to advertise his stands—thus

"Dr. A. B. will stand the following season, during the mouths of April and May at the town of A., the month of June at B., July and August at C., September and October at D. He will be let to patients either by the season or insurance at the reasonable price of ten dollars the season, or twenty dollars to insure.

"PEDIGREE.—Dr. A. B. was trained by Dr. C. D., and graduated at the University of New Yankeedoodle, and is therefore up to snuff and warranted not to flash in the pan."

Physician's Visiting List.—This beautiful little convenience for 1854, is before us. The work is now so popular, so necessary and so generally known that it is unnecessary to do more than to announce its appearance. With us it is a "*vade mecum*," a universal remembrancer and a day-book, as well as a *visiting list*. We would sooner think of practicing without a pocket *case* than this pocket *book*.

*We see by the way, that the distinguished Emeritus has a "prosector." Will our New York friends enlighten a backwoodsman as to the duties of a prosector to an Emeritus.

TWO CASES OF TRAUMATIC TETANUS SUCCESSFULLY TREATED BY ICE. By B. D. CARPENTER, M. D., Patchogue, Suffolk co., Long Island.—CASE 1. Aug. 22d, 1849.—E. G., aged 16 years, of good constitution and habits, jumped from a fence on the stump of a twig some half inch in diameter; which made a wound in the ball of the right foot three-fourths of an inch deep. Twelve days after the accident he complained of feeling lame and stiff, during the night was awakened by a violent spasm; the next day complained of stiffness and soreness of the muscles of the neck and throat, and pain at the scrobiculus cordis; the following night, during sleep, was seized again with spasm; and the next morning when I was sent for, I found him complaining of pain in the above region, great rigidity of the whole muscular system, attended with difficulty in swallowing and constraint in moving the head and jaws, and in articulating. During the spasm, the body was curved backwards and thrown to one side, the dyspnœa was considerable, pulse full and slightly accelerated, skin warm and moist, bowels costive, urine scanty and high-colored.

Administered a purgative, which was assisted by enemas. The patient was then put upon the free use of opium in the shape of Dover's Powder, and the bowels kept open by the use of cathartics and injections of 31 tinct. assafoetida in half a pint of soap suds, repeated as often as the preceding one came away. This treatment was continued for four days, during which time he gradually grew worse. The tetanic rigidity and spasm increased until the sixth day; when, finding he must die unless something farther could be done to allay the pain and extreme spasm, and viewing the difficulty as being an irritation of the spine, perhaps connected with congestion of the membranes covering the spinal marrow, I determined to apply ice to the head and the whole length of the spinal column, since the whole muscular system was affected. I did so, and in ten minutes had the satisfaction of seeing the pulse come down from 110 to 75, and all the urgent symptoms relieved; the rigidity was gone, and he had but one spasm after the ice was applied; his bowels were kept open, and assafoetida injections were continued twice a day, to allay the irritability of the nervous system, manifested by slight twitchings. No medicines were given by the mouth. The wound entirely healed, and in three days the patient was discharged cured; and his health since has been as perfect as before the attack.

CASE 2. Aug. 11th, 1853.—A. C., 21 years of age, a robust farmer, in good health, in assisting to remove some old lumber, stepped on the point of a rusty nail, which entered the hollow of the foot to the depth of three-fourths of an inch. The wound was not very sore, and was dressed with some simples by himself; and he remained at work moderately until the 16th, five days after the accident, when he complained in the afternoon of twitching in that foot and slight pain in the region of the wound and leg of that side. Was quiet the rest of the day, and retired early to bed, but slept none from restlessness, anxiety, and slight pains and twitching of the nervous system. On the 16th, felt some pain in the head and through from the lower end of the sternum to the back. I saw him at 6 P. M., and found him complaining of pain as above mentioned, which had gradually increased at the sternum, great rigidity of the muscles of the left side of the neck, accompanied with slight dyspnoea and some difficulty in swallowing. Even at this time there was present the peculiar expression of countenance found in tetanus. Pulse 100 and hard, bowels costive—had eaten nothing—the wound had not commenced to heal, and was covered slightly with a thin serous discharge. Made a free incision into the wound, and dressed it with bread and milk poultice, to which tinct. opii was added; ordered ten grs. of calomel with ten of rhei, to be followed by pil. colocynth. comp. until the bowels were freely moved, and enemas of tincture of assafoetida, 3j every three hours, or as often as the preceding one should be voided, large doses of Dover's Powder by the mouth, and to have the neck bathed in camphorated oil and tinct. opii. 18th, 7, A. M., found that the bowels had been freely moved, and that spasm of the whole muscular system had commenced. About 3, A. M., pain in the neck and at the sternum increased, and there was great rigidity of the muscular system generally; dyspnoea great, much difficulty in swallowing and articulation, jaws partially closed, entirely so during the spasm, pulse 120; indeed, all the symptoms increased in a marked degree, with slight delirium. Ordered one-fourth of a grain of morphine every hour, and to continue the assafoetida injections. 6, P. M., all the symptoms greatly aggravated, pulse so small and frequent that it could not be counted, jaws closed, breathing extremely difficult, body almost constantly drawn backwards or forwards and to one side, face pale, skin moistened with clammy sweat, and perfect rigidity of muscular system. Had slept none for 48 hours. Applied ice to the head and whole

length of spinal column; in twenty minutes the pulse came down to 100 the skin was covered with profuse perspiration, the muscular system relaxed; in short, there was a perfect yielding of all the urgent symptoms, and the patient slept soundly and pleasantly for the succeeding two hours, during which time the breathing was natural, and there was neither tetanic rigidity or spasm. When he awoke there was still some delirium, the pain in the region of the sternum was very great, and for half an hour the tetanic rigidity and spasm were considerable. The ice was again applied, when the symptoms immediately yielded, and the patient (with the exception of short intervals) slept quietly the balance of the night.

17th, 6, A. M., the bowels were moved by the assafoetida injections, the delirium had passed off, all the tetanic rigidity was gone. Pulse 80, breathing natural but said there was great soreness of the chest and all the muscles of the body. Drank some soup, continued the ice and injections as before. 11, A. M., there was some slight twitching of the muscles, without rigidity; from this time the patient continued to improve without either tetanic rigidity or spasm until, on the 25th, he was discharged cured, with the wound nearly healed.

The ice was applied from ten to thirty minutes each time, with intervals of from two to eight hours.

STRYCHNIA IN IMPAIRED SPINAL ENERGY.—Dr. Marshall Hall believes that this condition is due to causes of nervous exhaustion, such as excessive study, muscular effort, and sexual indulgence, and has found strychnia useful in correcting it. He gives minute doses thrice daily, for many months, in the midst of meals. The following formula may be used:

℞ strychniæ acetatis, gr. j.
acidi acetici, gtt. xv.
alcoholis, 3 ij.
aquæ destillatæ, 3 vj. M.

Dose, ten drops, containing one fiftieth of a grain.

The remedy acts on the spinal marrow, and is counter-indicated in cases of irritation of the nervous center and of spasm.—*Lancet*.

QUACKERY, IN HIGH PLACES.—During a recent visit to New York, the following *Card* was placed in our hands, the same having been widely distributed among the faculty of that city.

“All forms of Disease have a common *elementary radical*. This *radical* is the *chief element* of the predisposition, the nature and the causes of disease. Hence by protecting the system from the influence of this *radical*, we prevent disease; by allaying or removing this *radical* or its influences, we allay or remove disease without medicine.

For the purpose of demonstrating the above proposition a course of twelve lectures will be delivered at the *New York Medical College* in Thirteenth Street. Two free introductory lectures on Monday, and Tuesday evenings, November 29th, and 30th, at 7½ P. M. The course will be continued on the same evenings of each week, after the introductory at same place and time.

N. S. SAXTON, M. D.”

We give the *Card* entire, with the Italics as in the original. It is certainly a strange production, and altogether above our diagnostic skill to fathom. Had it appeared anywhere else but under the auspices of a regular Medical College, we should not have thought it more worthy of attention, than any other quack advertisement of the day. But that such a *Card* should emanate from a Medical College, purporting as it does, to have the countenance and support of a respectable Faculty, is a matter of special wonder, and we would respectfully ask some of our eastern friends to enlighten us with regard to the nature of this wonderful *elementary radicle*.

EPIDEMICS.—The first case of yellow fever in New Orleans, occurred this year on the 26th of May. The following is the appalling record of its ravages since, according to the N. O. Med. Register. June, 46 deaths; July, 1387; August, 4798; Total, up to September 1st, 6231. The treatment by large doses of quinine, which has gained great reputation in former epidemics, has not been found to answer in the present one. The following prescription is recommended by Dr. Bennett Dowler: Blue pill, calomel, quinine, each, gr. x.; morphia, gr. ij. Make ten pills; of which one is given every two hours. The Doctor, like Paris's English apothecary when puzzled, fires a good many shot.

The pestilence prevails in many other southern cities. We see by the papers that in Mobile the number of deaths from yellow fever on the 2d of September, was 165. On September 19th, there were 25 deaths at Vicksburg, Miss., in a population of 2000. A correspondent in Galveston writes us, (September 18th,) that the mortality from yellow fever in that city has averaged 10 daily, in a population of 4000. The disease also prevails in Houston, Pensacola, and other southern cities, in most of the West India islands, and in Brazil, to a very alarming extent.

Mr. Paton, surgeon at Kingston, Jamaica, gives, in the London Lancet for August 13th, some account of the yellow fever as it lately prevailed in that city.

All plans of treatment that ingenuity could devise were tried, and with very poor success. At first calomel and quinine was given in large doses, twenty grains of each, repeated if rejected by the stomach, and persevered in until sometimes a hundred grains of each were taken. The mercurial generally had a greater action on the bowels, if not, a dose of oil was given. Purgatives produced rapid exhaustion. When there was tenderness over the stomach, cups or blisters were applied to the epigastrium. Prusic acid and soda were used to allay vomiting; at a later stage this symptom was combatted by turpentine and creasote. Warm baths were used, and ice was applied to the head. Some cases required stimulants from the first; the best were brandy and champagne. Where there was restlessness and insomnia, and the brain did not contra-indicate it, a full dose of Battley's sedative had a good effect. Some were bled freely from the arm at the onset, with great relief at the time, but the symptoms would soon return. Mr. Paton thought that medicine had little power over the disease. He determined to try the sweating system, with wet sheets and the vapor bath. Under this system more recovered, but the mortality was still frightful. Mr. Paton regards the skin as the best emunctory for the elimination of the *materies morbi*.

Morbid anatomy threw little light upon the nature of the disease. The stomach was often healthy, though sometimes its mucous coat was completely disorganized. The liver was always firmer than natural, and of a light lemon color. The intestines are generally healthy, but full of a thick tarry secretion. The encephalon was sometimes congested, with effusion into the ventricles. The blood

was always fluid and highly carbonized. No traces of disease were detected in other parts of the system.

Death almost inevitably succeeded the occurrence of black vomit. Mr. Paton considers this symptom a simple hæmatemesis, the characters of the ejected blood being altered by admixture with the gastric juice.

Mr. Laird, Surgeon R. N. attached to the Royal Hospital at Bermuda, bears strong testimony to the efficacy of oil of turpentine in every stage of yellow fever. The dose was twenty minims, thrice daily, in camphor water, and usually nothing else was given. The following statistics are adduced in support of this treatment: Treated without turpentine, 164; died, 25; ratio 1 in 6,6: with turpentine, 164; died, 19; ratio 1 in 8,6.

On the other side of the continent, among the western Indians, and especially among the Sandwich islanders, small-pox is prevailing to a most terrific extent.

The eastern hemisphere is not more fortunate. Throughout Asia and the northern states of Europe, cholera is more or less prevalent.

At Berlin, from June 21st, to July 31st, there were 740 new cases, and 340 deaths. On the 10th of August the cholera was decreasing at Copenhagen. Out of a population of 130,000, the number of victims had been 4000, including 9 physicians, among whom we observe the name of M. Wilthusen, physician to the King of Denmark. More than 40,000 persons had fled from the city. (*L'Union Medicale August 25th.*) The cholera has reappeared at Moscow. One of its first victims was Dr. Siervruk, professor of anatomy in the university of that city. The fatal epidemic prevails all along the shores of the Baltic, at St. Petersburg, Elsinore, Riga, Cronstadt, Abo, Narva, etc.; the *Journal of St. Petersburg* announces its fearful fatality in the governments of Kiew and Tolin, and in the great commercial city of Bericzen; it has just (August 4th,) broken out in Dantzic. The late advices from England state that it is rumoured that cholera has made its appearance in several British ports.

SALINE TREATMENT OF DYSENTERY.—Several cases, which have come under our observation recently, of successful treatment of Dysentery with chloride of sodium, sulphate of magnesia, and other salts in small doses, have convinced us that these remedies are not

used as often as they might be with benefit in a class of cases in which portal congestion is the immediate cause of too frequent and free discharges of bloody and serous fluid from the intestines.

In a former number of this journal, we endeavored to show that alkalies and their compounds are the proper remedies in all cases of torpidity of the liver, resulting from a deficiency of alkalies as compared with fatty acids for the formation of bile.

Portal congestion from torpidity of the liver, caused by deficiency in the alkaline constituents of the blood, is doubtless one of the most frequent causes of dysentery and serous diarrhœa; hence it is that the substances under consideration are in many cases the most efficient and prompt remedies.

The cases which have been treated successfully by these remedies under our observation are not numerous, but sufficient in number to justify us in calling the attention of our readers to the subject.

One of the prescriptions that has been found most efficient in dysentery is—Chloride of Sodium ʒss, Sulph. Morph. gr. $\frac{1}{8}$ in powder or dissolved in mucilage of gum arabic, repeated every four or six hours.

H.

RUSH MEDICAL COLLEGE.—Some little time since it was announced in some of the daily papers of this city that Prof. D. Brainard, President of the Faculty of Rush Medical College, and Professor of Surgery, would soon leave for Europe to spend the ensuing winter. To prevent any misunderstanding on the part of the friends of the College, I am authorized to state that the Faculty have unanimously consented to permit Prof. Brainard to visit Europe during the present season. He goes out expressly for the purpose of procuring such books, apparatus, preparations, and means of illustration, as the interests of the College require, in view of the establishment of a good museum and library in connection therewith. In view of his temporary absence, the course of lectures on *Surgical Anatomy*, *Surgery*, and *Clinical Surgery*, will be given by Prof. Herrick. The course on *Descriptive Anatomy* will be given by Dr. J. W. Freer, for several years past Demonstrator of Anatomy in this College. The course on *Physiology* and *Histology*, will be given by Dr. H. A. Johnson, of this city, whose enthusiastic devotion to those branches, and familiarity with the use of the microscope, eminently qualifies

him for such a task. All the other branches will remain as in former years, and as specified in the Annual Announcement. Though all will regret even the temporary absence of Prof. Brainard from the post he has so long occupied with distinguished honor, yet, in view of the well-known reputation of Prof. Herrick, as a surgeon, both at home and in connection with the army in Mexico, and his long experience as Professor of Anatomy, we feel no hesitation in assuring those interested in the coming session, that the several courses of instruction will be as full and complete in every particular, as during any former College term.

N. S. DAVIS.

Sec'y of the Faculty.

CHICAGO, Sept., 1853.

"GALACTAGOGUE AND EMMENAGOGUE EFFECTS OF WARMTH AND STIMULANTS TO THE MAMMÆ. By JOHN ROSE CORMACK, M. D.—My object at present is to establish, by the brief narration of a few facts, the following propositions:

1st. Warmth and stimulants applied to the mammæ often act powerfully as *galactagogues*.

2d. Warmth and stimulants applied to the mammæ often act powerfully as *emmenagogues*.

3d. The leaves of the *bofareira* (or *ricinis communis*) and *jathorpha curcas* act as *galactagogues* and *emmenagogues*; but not from their possessing any peculiar or specific power.

I. WARMTH AND STIMULANTS APPLIED TO THE MAMMÆ OFTEN ACT POWERFULLY AS GALACTAGOGUES.—CASE 1. *Milk restored to the mammæ by hot fomentations.*—Last month a lady, when nursing her infant, about seven months old, was attacked with acute bronchitis of moderate severity, which was successfully treated by low diet, and tartar emetic in small doses. At the end of four days the bronchitis was cured; but the milk, which had previously been failing, almost entirely left the breasts. On the fifth day, from exposure to cold, she experienced a relapse of the bronchial affection. As she had been considerably weakened by the previous attack, and as the symptoms of the relapse were not sufficiently severe to justify a recourse a second time to antimony, I ordered her to take a draught containing ammonia and chloroform, as an anodyne, expectorant,

and diaphoretic, every eight hours; and to carry out similar intentions I also directed a succession of pillow cases, filled with heated moist bran, to be applied to the chest. When I saw her on the following day, after this treatment had been employed, she told me that she had profusely perspired for some hours; she was (after profuse expectoration) free from cough and pain in the chest; and, what was equally a source of pleasure to her, *her breasts had become distended with milk*. This lady was able to resume nursing, and to continue it with the assistance of a suitable diet.

CASE 2. *Effects of a sinapism applied to one of the mammae of a lady five months advanced in pregnancy; effects of warmth in the same case.*—A lady was under my care for bronchitis, at the same time as the patient whose case I have just sketched. She was directed one night to apply a sinapism over the sternum, which she did, but having fallen asleep, it slipped to the side, and remained undisturbed for about an hour upon one of the breasts. For some days this mamma was very much larger in size than the other, and its areola was also much darker. From the delicacy of this lady, and the unusual severity of the weather, I directed her to wear a double flannel jacket, and a wadded wrapper round the chest. She tells me that *the breasts are larger, and the areola much deeper in color than they ever were in any of her ten previous pregnancies, even at the full time*; and these conditions were established while her general health was exceedingly depressed by illness.

CASE 3. *Stimulating embrocation increasing the supply of milk*—A lady, though in excellent health, had a very scanty supply of milk for her infant, when it was a few weeks old. She consulted me as to the use of means to remedy this evil; and I advised her to rub the mammae gently every six or eight hours, with an embrocation containing a small quantity of tincture of cantharides and oil of thyme, and to sheath the mammae very warmly in wadding. *In a few days the milk was abundant.*

CASE 4. *Hot poultices keeping up the secretion of milk when this was not desired.*—A lady suffered after her confinement from a succession of abscesses and abortive abscesses in the breast. The surgeon who attended her treated her by antiplogistic medicines, under which discipline she passed some wretched months, from mental and bodily depression, aggravated by hysterical attacks. The local affection did not seem to make any satisfactory progress; and the great obstacle to a cure was stated to be the impossibility of getting rid of

the milk, in spite of saline purges being freely administered. The mammæ during the whole of the period to which I refer had been ceaselessly treated, night and day, with hot poultices and medicated fomentations. These applications were abandoned, and a generous diet prescribed. *In a few days there was not a drop of milk in the breasts*; and the abscesses, actual and threatening, had ceased to give any pain, and had, in fact, almost disappeared.

I might refer to other cases, which I have vividly in my memory; but the above, which have occurred within the last three months, seem sufficient to establish the first proposition, viz: that *warmth and stimulants applied to the mammæ often act powerfully as galactagogues*. I need hardly add, that along with the use of such means, the regular application of an infant to the breast would greatly assist in producing lactation, as, according to the testimony of various authors, this stimulus has of itself proved sufficient to restore the secretion of milk, and has actually caused it to flow, not only from virgins and other women who had never been pregnant, but even from males. Excitement and sanguineous turgescence of the gland is induced; and those conditions afford to the organ both a power and a stimulus to perform its previously dormant function.

II. WARMTH AND STIMULANTS APPLIED TO THE MAMMÆ OFTEN ACT POWERFULLY AS EMMENAGOGUES.—Warm clothing of the abdomen and limbs; hot hip-baths, and medicines which stimulate the bladder and rectum (such as ergot, cantharides, and aloes,) have undoubted emmenagogue powers in properly selected cases of retarded or suppressed catamenia; and, indeed, they constitute, in various combinations, the principal measures by which the physician usually endeavors to excite the ovarian nîsus upon which menstruation depends. The observant physician knows well, that while his treatment is directed to the uterus through the ovaries, the effects produced upon the mammæ are generally very striking, and the first indications which he expects to find of the uterus being roused from its torpor, are turgescence and tingling of the mammæ; phenomena which also usually precede normal menstruation. It is equally true, though not so familiarly understood, that measures which act directly and primarily upon the breasts, such as warm clothing to the bust, and the application of stimulants, not only cause them to swell and throb, but likewise stimulate the ovaries, and cause the menses to flow. The practice adopted by some practitioners, of applying leeches to the mammæ in amenorrhœa, owes its efficacy to fomentations used, and the irritation of the bites."

BIOLOGICAL SOCIETY OF NEW YORK.—*Extracts from the Minutes.* By JNO. C. DALTON, Jun., Secretary.—Meeting held at the Rooms of the N. Y. Preparatory School of Medicine, 809 Broadway, July 15th, 1853.

Mr. *Outram* called the attention of the Society to a spontaneous change which he had observed to take place in chloroform not sufficiently protected from the access of the atmosphere. He had found that chloroform, kept in this manner, lost its sweet flavor and anæsthetic properties, at the same time liberating the chlorine, which was afterwards replaced by muriatic acid, communicating a sharp, sour flavor to the vapor of the liquid. At that time the liquid was found to have lost all the ordinary properties of chloroform.

This change took place without the influence of any chemical reagent other than the atmospheric air. An analogous decomposition may be effected by the addition of acid or alkaline substances. Chloroform treated, with a solution of potassa, yields formic acid and chloride of potassium. Nitrous acid added to chloroform gives rise to nitrous oxide, formic acid, and chlorine—which last afterward becomes muriatic acid. Mr. *Outram* supposed this to represent the change taking place in the spontaneous decomposition of chloroform. Chloroform is a terchloride of formyle. The sulphuric acid with which it is prepared by distillation, is frequently contaminated with nitrous acid. This is converted into nitrous oxide, giving up a portion of its oxygen, which converts the formyle into formic acid, and the chlorine is set free. The decomposition of chloroform is, then, an oxydizing process.

The tests for this composition are the odor of the chloroform, its reaction with litmus paper, and with nitrate of silver. The production of muriatic acid gives rise to an acid odor, which may be more or less modified by the presence of undecomposed chloroform. Pure chloroform has no action on litmus paper. If decomposition has taken place, it produces a bright red stain. Nitrate of silver, added to pure chloroform, has no effect; but if muriatic acid or chlorine have been formed, a copious white precipitate of chloride of silver is thrown down. Mr. *Outram* exhibited specimens of pure and decomposed chloroform, and showed the action of tests on each.

Dr. *Haywood* thought that specimens of chloroform from different sources should be examined, for the purpose of ascertaining how frequently this change takes place in the shop of the apothecary.

He inquired whether any test were superior in delicacy to that of smell. Mr. *Outram* thought the test by nitrate of silver much more delicate than any other.

Dr. *Gardner* thought that if the chloroform were prepared with care, this change would not be likely to take place. He had a specimen at his house, which he had kept between two and three years, without taking any particular precaution as to exposure, and which was still unchanged, so far as could be judged from its odor and its narcotizing properties. He inquired what would be the effect of muriatic acid gas taken into the lungs, as it might be from a partially decomposed specimen, which still contained sufficient unaltered chloroform to diminish the sensibility of the glottis, and permit the inhalation of the acid gas. Might not some of the deaths from chloroform be attributed to this accident?

Dr. *Gilman* thought that the dangerous properties of chloroform were not to be separated from its narcotizing effects; and that in those instances where death had resulted from its use, the destruction of the patient's life was owing to a continuation of the same influence by which his sensibility and consciousness had been previously abolished. He thought that the variations of the pulse, if narrowly watched, would give sufficient warning of any threatened danger to life.

Dr. *Haywood* showed, under the microscope, specimens of crystallized kreatine, obtained by himself from the bullock's heart. This substance is readily obtained, being freshly soluble in water, but insoluble in alcohol and ether. The process is to take some lean, muscular tissue, which is to be chopped up fine, and treated with tepid water. The water is then to be forced out under strong pressure. The albumen and coloring matters are then precipitated by heat, and the salts by sulphate of baryta. The filtered solution then gives pure kreatine by evaporation.

August 5th, 1853.

Mr. *Outram* mentioned, that since making his observations relative to the spontaneous decomposition of chloroform, reported at the last meeting, he had found that in July, 1850, Mr. John Abraham, of Edinburgh, pointed out the fact, that chloroform manufactured there, after a longer or shorter period, underwent the same changes. Prof. Proctor, of Edinburgh, noticed the same in some Philadelphia chloroform. The observations of Dr. Christison, published about

the same time, showed that these changes were occasioned by impurity of the sulphuric acid used in the manufacture. In consequence of this, Messrs. Duncan & Flockhart (large manufacturing druggists of Edinburgh,) recalled their chloroform, and issued a fresh supply, purified by distilling from carbonate of baryta. Chloroform so prepared, could be kept for any length of time without change.

MALPRACTICE—A suit was recently brought against Talbot Watts the proprietor of a medicine known as "Watts' Nervous Antidote," by the mother of a girl, 27 years of age, said to be afflicted with epilepsy, to whom Watts administered his medicine, with the promise that he would return the money if it failed to cure, which he afterwards declined doing. The medicine is said to have increased the frequency of the fits, and to have endangered her life.

The judge charged the jury among other things, that the same degree of skill ought not to be expected, and is not in law required, in cases like this as in cases where regular physicians are called in. Persons who take medicines from advertisements in newspapers must, to a considerable extent, take the consequences.

The jury retired, and after deliberating about two hours, rendered a verdict for the plaintiff for *one thousand one hundred dollars*.—*N. Y. Medical Times*.

"THE *Rochester Democrat* of the 24th, ult, announces the death of the "Sleeping Man," CORNELIUS VROGMAN, who "died at his brother's residence, in Clarkson, on Monday the 17th inst. While on exhibition in New York, he was taken sick, which seemed to induce a wakeful state for a short period, and then a stupid condition, with intervals of wakefulness, until he was brought home on the 14th. He talked but very little, inquiring after his mother, who had been dead two years, and his father and brothers, whom he seemed partially to recognize. He complained of great internal heat, and soreness of his throat and stomach. On the morning of the day of his death he called for food, and ate a hearty meal, and from that time he seemed to be in pain until 2 o'clock P. M., when he died without a struggle. His age was some 34 years."

THE DETERMINATION OF UREA. By Professor LIEBIG.—The new method proposed by Liebig has the advantage of simultaneously determining the amount of chlorine and of urea. It is as follows: 100 grammes of mercury carefully purified from bismuth and lead, are dissolved in pure nitric acid; the salt is evaporated to a syrup like consistence, and then enough water is added to reach accurately to 1400 cubic centimetres. Every 100 cubic centimetres contains 7,140 grammes of mercury. If this solution be added to a solution of pure urea, a *snow-white* precipitate falls, which is a compound of urea, and oxide of mercury (U by 4HgO .) When the urea is all precipitated, and when consequently, nitrate of mercury is the solution, a *yellow* precipitate, hydrated oxide is thrown down by the addition of a little carbonate of soda to a drop of the urea. In order to determine the exact moment when the yellow precipitate occurs, the solution of the nitrate of mercury is of course added drop by drop from a burette, and from time to time a drop of the urine is taken and tested with the soda. One cubic centimetre of the solution corresponds to 10 milligrammes of urea, and from the quantity used, the amount of urea is calculated.

Although nitrate of mercury will thus precipitate urea, the bichloride will not do so, and on this fact is founded the determination of the chlorine. If the solution of urea be not pure, but mixed with chloride of sodium, no precipitate at first occurs with the nitrate of mercury, because sublimate is formed; if the nitrate continue to be added, then at last, the chloride being exhausted, the mercury combines with urea, as in the pure solution. Therefore the quantity of solution used before the white precipitate appears, shows the amount of chlorine which must have combined with the mercury first of all. A cubic centimetre of the mercurial solution corresponds to 10 milligrammes of chloride of solution.

In testing urine the phosphoric and sulphuric acids are first precipitated with barytic water; and after filtration, the urine is weakly acidified with nitric acid.

Although both the chlorine and the urea *may* be determined by the *same* quantity of urine, it is advisable to use two portions, one for the chlorine and one for the urea. The quantity of nitrate used for the chlorine alone in the first specimen, can be deducted from that used for the urea and chlorine together in the second, and the remainder gives, of course, the quantity which has been used for the urea.—*Brit. and For. Med. Chir. Review*, from *Annalen d. Chem. and Pharm.*, Band lxxxv. 1853.

ANTEFLEXION OF THE UTERUS AS A NORMAL CONDITION PRIOR TO PREGNANCY. By M. BOULARD.—A few years since, a very animated discussion took place at the Academie de Medecine, upon the subject of engorgement of the uterus. M. Velpeau was one of those who maintained that antelexions of the uterus are often mistaken for engorgements, while other speakers declared antelexion itself to be a very rare occurrence. M. Boulard, engaged in searching for examples of the deviation for Velpeau, was at once struck by the frequency of its occurrence in young subjects, while in older ones he scarcely ever met with a case, without, from the examination of the other organs, ascertaining that the subject of it had never been pregnant. After in this way collecting a great number of uteri from the dead-house, M. Boulard resolved to study the point during the development of the organ, and found that the uterus is almost always antelexed in the fœtus. He has continued to pursue the investigation from that period; and the present paper is founded upon the examination of 27 adult female subjects who had never borne children, 19 young girls from two to thirteen, and 57 full-timed fœtuses. In 98 of these antelexion has been found, and to such a point is the body bent upon the neck, that it is not possible to prevent its regaining the same position immediately after the attempt at replacing it has been made. Since these observations have been made, the author has sought every opportunity of verifying them in the living subject; but he has only had ten opportunities of examining the position of the uterus in the virgin, and in all these the antelexion existed.

M. Boulard accounts for this disposition having been overlooked by anatomists, by the fact that the bodies of women who have borne one or more children are those which are usually brought for dissection; and the organ is examined only after it has undergone this physiological change, or under the influence of the relaxed state of the tissues after death. When antelexion has been noted, it has been considered as an abnormal and diseased condition, and regarded as a cause of suffering which was due really to some morbid condition which had become accidentally associated with it.—*Brit. and For. Med. Chir. Rev. from Rev. Chir.*, xiii. 341.

BELLEVUE HOSPITAL.—Drs. Willard Parker and Wm. H. Van Buren have resigned their respective situations as Surgeons to Bellevue Hospital, which they have held much to the credit of that Institution; and Drs. Lewis A. Sayre and John J. Crane have been duly appointed to the vacancies thus created.

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PART FIRST.

ORIGINAL COMMUNICATIONS.

DR. DAWSON:

DEAR SIR: The following communication is from the pen of my old friend and colleague, Professor Judkins, who is now enjoying rare professional opportunities in Paris. I have perused it carefully and with the deepest interest; and I know your readers, many of whom are personally acquainted with its distinguished author, will do the same, if they can but have the privilege. Please place it before them, and oblige

Your friend,

R. L. HOWARD.

ART. I.—*Letter from Paris.*

PARIS, Nov. 5, 1853.

PROFESSOR HOWARD: I have been sojourning in this city since the 20th day of May last, and have been in daily attendance upon the Hospital and Medical Schools. During the first month of my residence here, all the knowledge I obtained was by observation alone. My ear not being attuned to the peculiar sounds produced, by running half a dozen words together; which constitutes the music of the French language. Yet the field of observation was ample. Scarcely a day passed, without affording an opportunity of witness-

ing operations in surgery, performed by one or more of the great masters ; whilst a large number of cases, of almost every variety of disease, were presented by the crowded wards of the various hospitals.

At first I made a tour of observation, in order to become familiar with the field of operations. At La Charité, M. Velpeau continues to occupy the position of chief surgeon. His wards and amphitheatre are crowded by physicians and students. He operates with a steady hand and sure eye. He is also an active member of the Academy of Medicine, particularly when any of the doctrines of M. Riquard are to be discussed. M. Gerdi, who also has a large surgical service in this hospital, has been absent during the summer. His health is very feeble, and it is believed that he will soon resign his position in the hospital, as well as his chair in the Ecole de Médecine.

His place at La Charité is at present filled by M. Jarjaret, an Aggrégé to the faculty, and author of a new work upon Surgical Anatomy.

At Hotel Dieu, M. Roux still maintains his post, and, although his locks are whitened by 73 winters, he is still active and sprightly. He operates with great dexterity. In the use of chloroform, he, as well as some other surgeons of Paris, appear to be afraid to carry its influence to complete anæsthesia.

This fear arises from the occurrence of some fatal accidents from chloroform, and from the result of some experiments made by M. Gosselin, who introduced chloroform into the veins of animals, and immediate death was the consequence ; thus showing that it has a direct sedative power upon the heart.

At St. Louis, M. Cazenave has a very large service in cutaneous affections. Typhus prevails to a very great extent. M. C. is very popular, as is manifested by the crowd of students who daily visit the wards, whilst it must be recollected that this hospital is located in a part of the city, some two miles distant from the students' quarter. I have not yet seen M. Malgaigne, the principal surgeon of this hospital ; but intend to avail myself of his lectures upon surgery, which will commence on the 15th of this month at the Ecole de Médecine.

At La Pitié, my visits have been confined to the wards of M. Valleix, who is a great favorite with the American physicians in Paris.

M. Maissoneuve, at Hospital Cochin, is considered one of the most promising surgeons of France. He was Interne to the celebrated Dupuytren. He is now certainly the boldest, if not the most skillful operator in Paris. He has been charged with being rash. In fact, he will undertake operations which have been declined by the most celebrated surgeons here. His manners are affable and pleasing.

M. Nelaton, of the Hospital of the Faculty, is deservedly, I think, the most popular man of all. In surgical pathology, it is said, that he has not his peer in France. He is a conscientious surgeon, and will refuse to operate unless the chances for recovery are good. His book upon Surgery, is an excellent work. His time is completely monopolized by the duties of his chair and a very extensive practice ; so that fears are entertained that a great lapse of time will ensue before he will be able to complete his book.

You are doubtless well aware that M. Nelaton, by his close and accurate observations, has thrown much light upon the pathology and treatment of Pott's disease of the spine. According to him, in at least 90 cases in 100, the disease is caused by either infiltration of tuberculous matter in the vertebra, or by an encysted collection of the same matter in their bodies. In one hundred specimens examined, he found only *one* where caries resulting from true osteitis was the cause.

There is an intimate relation between the tuberculous infiltration of the bodies of the vertebra and the destruction of the fibro-cartilaginous substance, if only one of the intervertebral substance is not diseased throughout the whole thickness. But if two contiguous vertebra, are thus diseased, the intervening substance soon loses all vitality ; for the vascularity of the bone is destroyed, through which it received nearly all of its supply of blood. The destruction, therefore, of the fibro-cartilaginous substance in Pott's disease, is an incontestible fact ; but this destruction seldom depends upon a primitive alteration in its structure. It is true, however, that pathology has shown that the little synovial capsules may become inflamed like other serous membranes, and an effusion of sero-purulent matter result. This inflammation, at first destroys it entirely. Yet M. N. repeats, that it is very seldom that Pott's disease is caused by this accident.

The sudden production of a gibbosity of the spine, is caused by the encysted form of this disease. A deposit of tuberculous mat-

ter is formed in the body of a vertebra, without infiltration beyond the cyst. This cavity gradually enlarges, causing a destruction of bone, more or less considerable, until a point is reached, where the body of the vertebra, reduced to a mere osseous shell, is no longer capable of supporting the superincumbent weight, and it suddenly yields; the superior and inferior walls of the cavity are brought, more or less, intimately in contact, thus expelling completely or only partially, the contained matter. The superior wall inclines forward, and the spinous process of the crushed vertebra becomes straightened and prominent behind, and thus the gibbosity is instantaneously produced. The cyst, thus emptied, becomes gradually hypertrophied, and undergoes a fibrous transformation; the fragments of the bone which escape destruction, become consolidated in their new relations, and are united to one another, and thus a cure is completed. In other cases, the cavity of the cyst, not completely obliterated, is in communication with an abscess of greater or less size, through which remedies may be carried even to the cavity itself.

During the past summer, two children in the wards of M. Nelaton, presented the two varieties of this disease. The first, a little girl, had tuberculous infiltration of four or five of the inferior cervical vertebra. She could not move her head, except by the aid of her hands—she was incurable.

The other case was a boy aged about 12 years, who had suffered from an affection of the encysted form in the lower dorsal vertebra. A gibbosity had been suddenly produced, and the disease of the spine had become greatly improved, if not completely arrested. But two large abscesses had formed, following the course of the *psaos magnus* muscle, and had pointed on the anterior part of both thighs. It is the symptoms following the treatment of one of these abscesses, that will more particularly arrest your attention:

Symptoms of poisoning from Iodine. Before giving this history, I will say that M. Nelaton stated that, he had a woman in his wards, a little more than one year ago, to whom, for some disease not mentioned, he gave 20 drops of Iodide of potassium daily. After some time upon this treatment, she was suddenly attacked by symptoms of the most alarming character—simulating cedema of the glottis, &c. By the free use of emetics, she was happily relieved in a short time.

Wishing to test the virtues of Iodine, in one of the abscesses in

the young boy, he proceeded to inject the following mixture: Tr. of Iodine 1 part, Aqua Distillatæ 2 parts, and Iodide of Potass. q. s., to prevent the precipitation of the Iodine.

June 20. At 2½ o'clock P. M., he punctured the abscess upon the left thigh, and a large quantity of pus was discharged. After the cavity had been emptied by judicious pressure upon its walls he injected by aid of a hydrocele syringe, twice filled, the above preparation. After a few moments had elapsed, efforts were made to expel the fluid from the cavity; but not more than one-half of the original quantity could be extracted. The canula was withdrawn, and the edges of the puncture maintained, in apposition by a plaster of Diachylon.

At 3 o'clock, one half hour after the injection, the boy complained of giddiness and difficulty in seeing. This was soon followed by vomiting. The matter ejected from the stomach, resembled chocolate mixed with serum. He complained of great distress; his skin was moist, extremities cold, pulse small and thready, respiration hurried, with all the signs of great prostration.

At 5 P. M. the vomiting still persisted; but his pulse was somewhat improved. The same symptoms were present throughout the night.

June 21st. Vomiting continues; low muttering and groaning; great oppression of general system; both upper eye-lids enormously swollen and of a violet color. He complains of pain in his throat.

June 22d. He appears stronger, and is able to explain his feelings better. The throat was found to be dry, but not otherwise changed. Respiration difficult, particularly during the act of inspiration. His cough is precisely like that of croup, and there is no vibration of the voice.

The Aphonia, Croup, and difficult inspiration, are the proper symptoms of that œdema of the glottis, pointed out by M. Orfila, as symptomatic of poisoning from Iodine. These symptoms, added to the swelling of the eye-lids and the vomiting, left no doubt as to the cause, which was manifestly the absorption of the Iodine which has remained in the cavity of the abscess.

In the treatment, emetics were not to be thought of, although they had acted well in the first case mentioned. The boy had already vomited abundantly.

During the first two days, nothing but small pieces of ice and cold drinks were given. Sinapisms were applied over the extremities, and slight blisters applied to each side of the larynx.

On the 3d day after the vomiting had ceased, a pill was given containing one drop of croton oil, in order to remove any irritating matter contained in the stomach. The boy gradually recovered. If those means had failed, Tracheotomy would have been performed.

A warm discussion took place recently before the Academy of Medicine, upon the subject of Syphilis Larvée. As usual, M. Ricord occupied one side of the question, and Messrs. Velpeau, Roux, and some other savants, were arranged against him. It is said that M. Velpeau is uncompromising in his hostility to many of M. Ricord's doctrines.

The discussion followed the reading of a report upon the power that sulphurous water possesses in developing the latent power of Syphilis.

During his remarks, M. Ricord said, that he believed in a Syphilis Larvée, and expressed doubts of the existence of any system of treatment having the power of eradicating the disease. He declared that he had seen secondary manifestations appear 15, 20, 30, and even 40 years after the primary accidents. But ordinarily, the secondary manifestations follow in six months, or one year, if permitted to take its own course, and no treatment has been adopted. He would venture to say, that there was no certain prescription for the cure of Syphilis. As to symptoms of the disease which had appeared late in life, in persons who had never been subjected to a mercurial treatment, he would attribute it to hereditary transmission. He has seen persons, born of infected parents, present symptoms of Syphilis, after 20, 30 and 40 years, without ever having contracted the disease by contact. He believed that sulphurous waters had the power of developing the latent virus.

Mr. Roux said, the doctrines advanced by Ricord, upon the inefficacy of medicine to cure Syphilis, was disheartening and discouraging.

He believed, however, that mercury was powerless against latent Syphilis, and was only useful in syphilitic manifestations. He continued his remarks for some time, in opposition ; but was more mild in his denunciation than M. Velpeau, who occupied the floor for a long time, and was very sarcastic in some of his remarks. He protested against the law advanced by M. Ricord. He said he was convinced in his own mind that he had seen secondary symptoms appear after a great number of years, in persons who had undergone no kind of treatment whatever.

M. Gibert maintained the same views as M. Valpeau.

M. Ricord replied to all the objections which had been urged, and contended that what he had urged was true, upon the incubation of the disease and upon the uncertainty of a complete cure. If M. Velpeau has seen accidents appear after a long lapse of time, it was in persons either hereditarily affected, or who had undergone a mercurial course of treatment.

The late appearance of Syphilis from hereditary influence, is a fact not more astonishing than the appearance of the secondary symptoms, long after the primary accidents.

M. Ricord has always proved himself stronger than his opponents upon this subject, and he is sustained by a large majority of the best men in the profession.

M. Jobert, (de Lamballe) of Hotel Dieu, has recently submitted to the Academy a long paper, detailing a number of experiments upon animals, in order to prove the efficacy of electricity against the grave accidents sometimes produced by chloroform.

It appears, however, that his experiments were not new ; for, a few days after his report was published, a communication appeared in the Union Medicale, signed by M. Abeille, who referred to his own report to the Academy, October 20, 1851. This report gave a long list of experiments analogous to those performed by M. Jobert. His conclusions had been published in all the journals, and he was much astonished that a gentleman of erudition should be ignorant of the fact.

Since my arrival, I have watched with much interest M. Jobert's treatment of diseases of the os and cervix uteri, benign and malignant ; and have arrived at the conclusion that the cases which have been cured, and no return of the disease, were simply ulcerations, or cancrroid affections, and not true cancer. My attention has been drawn particularly to one case, a woman aged 30, who entered Hotel Dieu about the 1st of July. She presented an irregular ulcer on the cervix uteri. The discharge was foetid, but her general health was not much impaired. Since her admission, she has been subjected to the treatment of the *fer rouge*, or actual cautery, and which appears to have aggravated the disease ; the ulcer continued its ravages, and her general health has become much worse. Skin sallow, emaciation, and all the features of cancerous cachexia established.

Yet there can be no doubt that M. Jobert has performed many astonishing cures of obstinate disease of these parts. But, as I said before, I think all belong to simple ulcers, or mere cancrroid affection. The success which has attended his operations upon Vesico-Vaginal and Recto-Vaginal Fistula, is better comprehended by a person who has seen him operate. Every possible advantage is obtained. Two masculine assistants flex and divaricate the thighs; and, by the aid of angular wooden spatulas, acting as levers, the parts involved are fully exposed; so that the operation is rendered comparatively simple and easy.

M. Jobert treats fractures without the aid of splints; in some cases without bandages. In one case, bands for extension and counter-extension, were all the dressings that were placed about the limbs. I will give you the result after I have ascertained it myself.

By the way, a case managed in '53, now in the wards of Hospital Cochin, is being treated for fracture of the neck of the femur—intra capsular. The only apparatus made use of, is a simple cross-piece at the foot to keep the foot steady, and prevent any lateral movement or rolling motion of the leg. There is no extension or counter-extension used, and no dressings whatever near the region of fracture.

The treatment of Aneurism, Varix, &c., by injections of the per chloride of iron, is receiving a great deal of attention. I have seen its efficacy tested in an Aneurism of the Bronchial Artery, under the care of M. Velpeau, at La Charité: it failed, and he was compelled to ligate the artery: it has failed also, in some of the other hospitals. Before the American Medical Society of Paris, last week, Professor Brainard, of Chicago, stated, that the failure in these cases, was owing to the fact that the canula for conveying the solution into the sac, had never been carried far enough, so that the injection was thrown between the layers of the old coagula, and could have no other effect than that of causing irritation and inflammation. He mentioned the steps of M. Velpeau's operations, and called attention to the fact, that true arterial blood did not follow the introduction of the canula. Prof. B. stated that he had used a solution of the Lactate of Iron, as injection in vessels, which caused their obliteration—this he reported in 1850. The quantity of the article used at each injection, varied from one to three grains. Recently, in London, he produced a complete cure of a large aneurismal tumor of the orbit by the same remedy. This case is reported in the London Lancet of October last.

M. Demarres, author of the best work in French, upon Diseases of the Eye, has a very large clinique three times a week. He is a beautiful operator and an ambi-dexter. He always, I believe, operates for cataract by extraction, and is generally successful.

In the cure of Tumeur Lachrymale, or chronic inflammation of the lachrymal sac, he adopts a new method; the object is to obliterate the sac by the use of the actual cautery. He first makes an incision into the sac, commencing immediately below the Tendo-Oculi, and carrying it downwards, inclining a little outwards, for one-half or three-quarters of an inch. "After the bleeding has ceased, he applies the hot iron to the sac, taking care to avoid the edges of the wound, which is held open and protruded by two flat curved instruments. He is also particularly careful to avoid carrying the point of the hot iron on the side next to the ball of the eye. I have seen some seven or eight patients operated on in this manner, and, with one exception, they have apparently been cured."

About two weeks since, he operated on a poor fellow who had a piece of percussion cap lodged in the posterior part of the globe; he was suffering intensely. M. Demarres made an incision behind the cornea, through the sclerotic and choroid coats, and then carried a small pair of forceps through the opening in search of the foreign body. His search was fruitless; but the intense pain which he had previously suffered was greatly mitigated.

On Wednesday last, Nov. 4th, M. Maissonneuve removed nearly all the bones of the right side of the face. The patient was a man aged about 50. Several years since, a small wart-like excrescence made its appearance on the right side of the upper lip. This was removed by M. Logier, Surgeon of La Pitié, who pronounced it a case of cancrroid affection. Sometime after the removal, it reappeared, gradually enlarged, and finally assumed an ulcerated form.

When this man entered the wards of M. Maissonneuve, some three months ago, he presented a revolting picture. The angle of the mouth, part of the upper lip, and the superior half of the cheek were gone. The large cavity, with its projecting, rugged and indurated edges, formed some resemblance to a magnified chancre. Indeed it had been thus diagnosed at some period of its history, and an anti-syphilitic course of medication had been prescribed.

During the past month, the bones were found to be deeply involved in the disease, and the sub-maxillary gland swollen. The lymphatics in the neighborhood were little affected; no signs of cancerous ca-

chexia were present ; the general health being comparatively good, several kinds of treatment were tried without success. Internally, Mercurials, Iodides and other remedies, were given ; and, locally, preparations of Arsenic, Chloride of Zinc, Hydrochloric Acid, and the Actual Cautery, were successively tried ; but all appeared to have no other effect than that of aggravating the disease. The poor fellow was informed that his only chance for life was in an operation, to which he finally consented. The operation was performed on last Wednesday. The upper jaws Malar, a portion of the Nasal, and all that part of the Inferior Maxillary between the Mental Foramen and the Articulation, were removed, together with portions of the Parotid and Sub-Maxillary Glands. A large number of small arteries were ligated, and the Actual Cautery was applied to several parts in the large cavity, resulting from the removal of so many parts. If I understood M. Maissoneuve correctly, he believes that the disease was a combination of Cancroid Affection—Hospital Gangrene.

To-day, Saturday the 16th, this patient appears to be in as good condition as could have been expected. The large cavity is left open ; no dressing as yet. Judging from the history of previous cases, I should say he has but little chance for life.

I will add here the report of a case made to the Academy of Medicine, by M. Maissoneuve, which is as follows : Dr. J., a member of the Academy of Medicine, and Chairman of the Committee on Vaccination, has been occupied for several years, in sending into various departments of France, liquid vaccine virus, preserved in small glass tubes. This work of enclosing the virus, which was performed by himself, required that he should hold in his mouth a certain number of these tubes. Several times his tongue was slightly wounded by their points. After some time, the wounded part became indurated ; but these would often disappear after the lapse of a few days. At length the induration, thus formed, presented and gave rise to a most grave disease. Tormented by the persistence of this induration, he attempted to remove it by cauterization. He first employed the Nitrate of Silver, then the Acid Nitrate of Mercury. But this treatment, far from arresting the progress of the disease, only served to aggravate it. Large plaques developed themselves upon the whole surface of the tongue, and later a deep ulceration invaded the central part of this organ. In compliance with the advice of some friends, he submitted to a more energetic

cauterization with the Actual Cautery. But this gave new activity to the disease. All of the anterior part of the tongue, as far back as the Calciform Papilla, became the seat of a considerable induration; while, at the same time, the central ulcer made rapid progress. To these symptoms were very soon added lancinating pains, which prevented him from having any repose. He consulted Dr. Ricord, who submitted him to the full influence of the Iodide of Potassium; but in spite of this treatment, the disease became more aggravated from day to day. The tongue, enormously swollen, ended by obstructing the saliva which had flowed continuously; speech became impossible, and he was compelled to subsist entirely upon liquid food. It was under these circumstances, that, by the advice of Dr. Ricord, he came to consult me. In presence of such a grave affection, in the relief of which all medication had failed, I believed it my duty to propose amputation, as the only resource. It was performed on the 24th of August, at the Maison de Santé of M. Pinal, in the presence of Drs. Ricord, Larrey, Richard, Damolet, Lauglebert, Pinel, and Alexis Favrot. The patient, having been placed under the influence of chloroform, I made, at first, an incision through the lower lip and soft parts on the median line of the chin, and then, by the aid of the chair-saw, I made the section of the bone, the two parts of the inferior jaw being separated so as to enable me to seize and draw forward the tongue: by a rapid dissection, the diseased parts were removed, more than the anterior half of the tongue, and to the depth of eight centimeters. The sublingual gland was sacrificed, Ligatures were applied to each of the important vessels, so that but little blood was lost. After this operation, the branches of the lower jaw were brought together and maintained in contact by means of thread wrapped around the incisor and canine teeth. The ligatures of the vessels were directed under the chin, through the inferior angle of the wound, and the edges of the divided parts were retained together by the twisted suture. In spite of the extreme gravity of the affection, no accident resulted. The union of the internal parts was, by the first intention. The cavity produced by the great loss of substance, was rapidly filled; the bone is consolidated; and to-day, forty days after the operation, the patient has recovered his speech, and the power of taking and chewing his food.

From the happy termination of this case, and the result of other operations, in the healthy parts of this city, I am induced to believe

that the terrible fatality attendant upon surgical operations, in the large hospitals, is entirely owing to the impure air of the wards. During the past three months, I have seen a large number of capital operations, performed in the most skillful manner, and probably by the best surgeons in the world, followed, in a few days after the operation, by erysipelas, purulent absorption and death.

I have seen three cases of chronic inflammation and ulceration of the knee-joint, treated by free incisions being made into the joint, on each side of the knee, and the contents washed out by means of a syringe. In two of these cases, symptoms appeared demanding amputation: after which symptoms of purulent absorption was manifested, and death soon followed.

The third case gradually sunk from constitutional irritation, and died on Friday last.

M. Valliex, the distinguished physician of La Pitié, has been treating acute rheumatism with the Sulphat of Quinine. He often premises one or two venesections, and then places his patient upon $2\frac{1}{2}$ or 3 grs. doses of the Quinine, repeated at intervals, that will permit him to take about 40 grains in 24 hours. This treatment, in his hands, has been followed by the happiest results. Often the patient is completely relieved of his sufferings in the course of four or five days.

At Hotel Dieu, they are testing the virtues of Veratria, in the same disease; but nothing conclusive has yet been determined.

A new instrument has been presented to the Academy by M. Secrelan, for operating upon the male urethra. He says that a single introduction of it will serve a triple purpose—drawing off the urine from the bladder—exploring, and cauterizing a given point of the urethra.

The Union Medicale, of this morning announces the resignation of M. Louis, at Hotel Dieu. The cause assigned, is the severe illness of his son, whom he intends to remove to a more genial climate.

The same paper contains a long article upon cholera: the first part is a very lengthy report from M. Jolly. I gather from it that he has arrived at nearly the same conclusions of M. Gros, of Moscow, who sent a paper to the Academy of Medicine, and which was published in the Gazette des Hopitaux of last week. They are as follow:

1st. That the mortality of Cholera is as great as it ever was, malgré the different kinds of treatment which have been reported as efficacious.

2d. That Cholera is not contagious.

3d. That its connection with meteorological and hygienic agents, is more obscure than ever.

4th. That Cholera Emblée is rare, if not impossible.

5th. That the organic perturbation is always announced some time previous to the violent invasion of the disease.

Up to this time, no case of Cholera has occurred this year in Paris. I learn, however, that it has appeared in Brussels, and two fatal cases have appeared at Havre.

J. P. JUDKINS, M. D.,

Prof., etc., Miami Med. College of Cincinnati.

ART. II.—*Hints on Blisters*—By T. W. BRADLEY, M. D., Florence, Pennsylvania.

That blisters constitute a remedy of much value, I believe all regular practitioners admit. No matter how produced, they may be used advantageously, but in order to derive all the benefits they are capable of conferring, they must be used with much care and discrimination, and to a want of this—I think—may be attributed much of the disappointment, and many of the evils resulting from their use. In fact most of the old remedies—or those which have been long in use are used carelessly, and their effects very little scrutinized the *new ones* only receiving much attention. The many ways by which a blister may be produced, I shall not notice, but confine my remarks particularly to blistering by cantharides.

That inflammation is essential to the production of a blister, I believe all agree, and that inflammation of a *part* will affect the whole system, (or at least will produce what may be termed a *general* impression,) is a fact upon which often their application is based—but that cantharides exert a *specific* influence, independent of their power to vesicate, should, I think, be borne in mind when they are used for this purpose, or, (in other words,) we should recollect that while we are making a *local* impression, we cannot avoid a *general* one. Often, it is true, this is desirable, but to know whether it is or not, and to be governed by that knowledge, is essential to the judicious application of a blister. We should recollect that cantharides in ad-

dition to their being vesicant, are a general stimulant, a Tonic, an Alterative, &c., and although they may not produce those effects when we don't want them, yet by virtue of their *power to do so*, they may do something much less to be desired.

But to a blister independent of the collateral powers of the fly. To produce this, inflammation to the extent of detaching the cuticle, and forming a collection of serum is necessary, and that congestion of the vessels of the part must precede inflammation is obvious. Then the fact should not be lost sight of, that the blood can only perform its functions healthfully, when its elements exist in their *normal proportions*, and that this serous discharge, may disturb the equilibrium. Again, it is said, that inflammation increases the fibrine, as well as its plasticity; and will not our observation justify the conclusion, that cantharides have some power to do so, independent of the inflammation. But to the rule that they increase the plasticity of the blood, there are exceptions, examples of which we have in those malignant fevers in which the aplasticity of the blood continues, despite the application of blisters. Of this it seems to me we should not think strange, as we have evidence that in those cases, the material or pabulum, from which fibrine is formed is not present in the blood, but under ordinary circumstances, they no doubt do increase the plasticity of that fluid, or in other words the amount of fibrine. Hence, to apply them where this element exists but in its normal proportion, might be injurious by increasing *positively* the amount of the plastic material, and *decreasing* positively the amount of serum, a two-fold means of disturbing the equilibrium of the blood. If the blood is too plastic, that condition should be changed before a blister is applied, and if the elementary condition of this fluid be normal, should we not adopt measures calculated to prevent this change? Certainly we should, for although a change of this kind might be desirable where a want of plasticity existed, no such change is necessary where such want does not exist, though we might not have a local disorder, (such as a blister produces,) to contend with. Now if it be a physiological fact, that fibrine is the product of albumen, it seems fair to infer that the rational way to prevent the formation of fibrine, would include means limiting the amount of albumen, as well as those calculated to prevent its change into fibrine, or favor the change or removal of the latter material when formed. A knowledge of the affinity fibrine has for oxygen, carries with it a knowledge of the fact, that defibrinated blood can-

not readily be oxydized, as well as the fact that blood unduly fibrinated, will under ordinary circumstances be unduly oxydized, and in this connection fat holds a relation to oxygen similar to that of fibrine; hence fat persons as well as those having blood unduly fibrinated should be blistered with caution, because, in proportion to the amount of oxygen consumed will the heat be; and if fibrine has an affinity for oxygen as strong as we have reason to believe, may we not say that in proportion to the amount of fibrine present, will the amount of oxygen consumed be; and account in this way to some extent at least for the increased heat of febrile cases, particularly when a blister is applied. All these, and a hundred other considerations bear upon this subject, and especially upon the *blistering point* in disease, before which a blister will be injurious, and after which, it will (to say the least) do no good. Granting the above premises to be correct, we see how the effect of venesection, nitre, tartar, &c., becomes necessary (often at least) ere a blister is applied. Anodynes also, by quieting the nervous system and thereby rendering respiration less frequent, will diminish the heat, and hence, combined with refrigerants, diaphoretics, &c., should generally, if not always accompany a blister. Infants bear them not so well as adults. This may, I think, be accounted for on the principles above suggested, the nutritive powers are more active, so much so that notwithstanding the waste, the body increases rapidly in size; again, the *formative process* may be, and most likely is in disease suspended, while even more than the ordinary amount of plastic material is present, hence a state of hyperinosis and undue susceptibility to the injurious effects of a blister would exist, and here the peculiarities connected with the brain present themselves as obstacles to the use of anodynes, so that we cannot avail ourselves of their soothing influence as we would in adult cases. Dentition also often presents itself as an obstacle; and he who practices regardless of the presence of this function and its physiological effects, will no doubt often have cause to regret the application of a blister. That pregnant females bear blisters illy, is well known; this it seems to me should not appear strange, had we not had the fact demonstrated. The function called gestation, may be interfered with in a thousand ways, and as nature's laws are perfect, any interference with them *must* result in derangement, and abnormal manifestations. Hence, as a conveyance even in health (during gestation) we might expect a blister to be productive of evil, if so, certainly we may sup-

pose much care necessary when we use them where there is disease, or functional derangement existing with pregnancy. The blood contains more fibrine than at other times in health, but by some unknown law of nature, the system is made to tolerate it; but may we not suppose that in doing so, it is taxed to the maximum extent of tolerance, and that the increased amount of plasticity we expect a blister to cause, might alone account for many, if not all the abnormal manifestations we generally have accompany it in pregnant females. Again, the uterus and its appendages require a larger amount of blood than in the unimpregnated state, and the extent of this increase, we can see may depend upon various circumstances, hence, anything interfering with those circumstances, will disturb the equilibrium. A lengthy notice of this part of the subject would perhaps be tiresome to the reader, yet two points I trust I may notice, 1st, a blister by diverting the circulation to its seat, may so congest the vessels of that part as to press upon the nerves sufficiently to induce or set up in the nervous system, in its then peculiar condition, all the train of morbid manifestations usual as the result of a blister in pregnancy; and secondly, by this derivative means deprive the uterus and its contents of their due amount. Succeeding this determination, a secondary (or counter) current may take place by which the vessels of the uterus will be congested, and by the pressure this would subject its contents to, functional harmony would of course be disturbed, abortion would be threatened, several vascular disturbances would ensue, a great deal of nervous excitement, &c., ere harmony could again be restored. If fibrine is the product of albumen, and a certain amount of albumen is essential to the well being of the Foetus, might a blister by increasing the former, not diminish the latter to an extent incompatible with the well being of the Foetus, or, with healthy gestation?

PART SECOND.

AMERICAN INTELLIGENCE.

ART. I.—*Prevention of Yellow Fever.* By SAMUEL A. CARTWRIGHT,
M. D.

Where there are three ways leading to the same end—one, short, cheap and safe—another beset with manifold dangers, and the third, not only dangerous but expensive and impracticable, we ought to choose the safe way. Governed by extreme opinions, New Orleans has never done so, but has invariably chosen the last two, and has never adopted the first, in trying to arrive at that desirable object—the *prevention of yellow fever.*

Contagion and non-contagion, the one engendering idle fears and the other encouraging a reckless disregard of danger, have been regarded as things instead of mere abstractions. They have nothing substantial about them to build any system of sanitary measures upon. They are relics of mediæval science, mere terms, invented before either yellow fever or cholera was known. Yet these terms, handed down to us by a barbarous, vain, self-important and non-progressive science—not derived from nature or the observation of facts, but resting upon the dogmatic and logical basis on which the thing called learning in the dark ages stood—have been dignified into a directing principle, governing all those measures heretofore adopted to prevent yellow fever in New Orleans. The consequence is, the community is divided into two parties, contagionists and non-contagionists; and like all parties, more intolerant to opposition from outsiders, or persons belonging to neither party, than from each other. If any objections be made to stretching yellow fever, ship fever or cholera to the contagious dimensions of small-pox, or to applying the means applicable to the prevention of one disease to other diseases governed by different laws, and so essentially different in

their natures as to be generated by what would prevent another, he is immediately ejected from the councils of the one party to fare no better from the other, unless he subscribes to the doctrine that yellow fever, ship fever and cholera are absolutely as incommunicable as a tooth-ache. To speak openly, or even to whisper, that facts indicate that these diseases can be, and have been dropped at wood yards, or communicated under certain circumstances to our citizens by the steamboats and shipping, would ruin the reputation of any man with the non-contagionists. Hence, between the two, true science has become unpopular. Logic cuts at it from every grog-gery, and the shafts of ridicule are hurled at it from every street corner.

Dr. Bennet Dowler, of world-wide fame, with more progressive knowledge on the subject of yellow fever than, perhaps, any other man in existence, eminently successful in his practice, and unexceptionable in morals, receives no encouragement or patronage from the wealthy or moneyed men from that city, whose reputation abroad, for science, he has done so much to promote; nor has that progressive knowledge, that true science, which alone can form the basis of sanitary measures to prevent New Orleans from being scourged by devastating epidemics, been regarded of sufficient importance to be called into requisition by the governing authorities. A war of words, between the ins and the outs on the obsolete idea of contagion or non-contagion, when taken from small-pox and measles and applied to yellow fever and cholera—diseases governed by different laws—has drowned the voice of the scientific Dowler—thrown him into the shade of obscurity, and left the great emporium of the South a prey to those terrible epidemics, that all the wrangling about contagion or non-contagion can never prevent, and which nothing short of ascertaining their laws by the toilsome, unobtrusive and laborious inductive or progressive sciences can ever keep out.

The non-contagionists when in power, to satisfy an abstraction drawn from an obsolete, non-progressive science, admit foul, filthy emigrant ships into the ports of the great Southern emporium, and send the sick emigrants themselves, whether ill with cholera, yellow fever, typhus or ship fever, into that immense establishment, the Charity Hospital, the largest institution of the kind in either Europe or America, as far as acute diseases are concerned. The non-contagion party thinks it would forfeit its right to be regarded as consistent and learned, if it were to refuse to admit them; because such

diseases do not come up to its standard and definition of contagious maladies, when tested by the logic which mediæval learning applied to small-pox and measles. But its definition of contagion does not prevent the foul excretions on the persons and clothing of the sick from infecting the wards of the Hospital, any more than it prevented the noxious effluvia from the prisoners of the Old Baily from infecting the judges, lawyers and by-standers with a mortal malady. That a large number of apparently healthy prisoners, coming out of foul jail into a crowded court-room, did communicate a most dangerous malady to those present, is a historical fact so far lost upon the non-contagion party, that it admits emigrants ill with cholera, yellow fever or typhus, not only into the Hospital, but into dwellings of the most popular parts of the city. Filled with a ruling idea it cannot see why a little foul air from the hold of a ship should be hurtful to any, than the few on board, who might happen to breathe it when discharged. To admit that poisoned air, thus pent up, could, under certain circumstances, infect the surrounding atmosphere, would make it a contagionist in its own estimation and according to its own definition of the term; if that definition were applicable to the subject. The highest of all authority has said, that "a little leaven leavens the whole lump." But it rejects that authority sooner than yield an abstraction. The contagionists and non-contagionists can see only the two ends or extremes. Their definitions place cholera, ship fever, typhus and yellow fever as wide apart as the poles from contagion, and they will acknowledge no intervening ground. If either party is driven from one pole it flies to the other, and disdains to stop at any intervening point for fear of being thought ignorant of what contagion or non-contagion is, without seeming to know that progressive science has swamped the whole foundation of the doctrine of contagion and non-contagion when applied to the diseases just mentioned. The danger now is, that the non-contagionists, excited by the fear of a repetition of the evils just witnessed, may fly to the opposite extreme and unite with the contagionists on a system of sanitary measures, founded upon logical abstractions instead of inductive truths, and better calculated to breed than to prevent the diseases they are intended to guard against. The danger is, "*the perish commerce*" doctrine, or the same thing—rigid and protracted quarantines—may rise into popularity, and city vie with city—country with country—Europe with America—in harassing commerce, as in former times, with those vexatious, ex-

pensive, useless and pernicious restraints, which, inductive truth derived from progressive science looking back upon the thousands of experiments already made, declares had no more effect in walling out typhus, cholera or yellow fever, than in excluding caloric, magnetism, or electricity.

It would be tedious and require volumes to enumerate the many sacrifices which have been made of the mercantile and all other interests, in trying to quarantine out various diseases by rules and regulations drawn from the barbarous practices of the dark ages, which vain abstractionists, with but one idea and that erroneous, or true only in part have pronounced contagious. The merchants themselves, actuated by patriotic motives, and forgetting their own interests, were always among the foremost in lending a helping hand to those measures to promote their own ruin, supposing that the best interests of humanity required the sacrifice. At length, in regard to the terrible typhus of Europe, progressive science made the discovery, that it was an artificial disease, made by bad governments. Governments which created want to diminish wages, and which punished their poor with hunger, cold and nakedness to extort labor at reduced prices, were and are the hot beds of typhus—a disease scorning the most rigid quarantine regulations, and leaping over the sanitary cordons drawn around every misgoverned city to keep it out. But is not typhus contagious? says one party—is it not of domestic origin, and produced by filth? says another. It will spread from one to another in crowded, filthy hovels, unwashed and unventilated. It seems to glory in a confined, malarious atmosphere; but often the most filthy places are entirely exempt from its ravages. While the war of words about contagion and non-contagion was raging with increased violence throughout the various monarchies and despotic governments of Europe, and after both contagionists and non-contagionists had tried their hands, and were unable to prevent typhus from sweeping off hecatombs annually, progressive America, by the example of her glorious republican institutions, showed twenty-four millions of people entirely exempt from the pestilence, except in a few localities where European anti-republican customs have been imitated; thus proving that the contagionists and non-contagionists of the logical school had entirely mistaken the nature of the disease; that it is an artificial ailment, caused by war, and generated among every misgoverned people in time of peace. During the 25 years war in Europe, terminating in 1815, the typhus,

under the name of camp fever, malignant, pestilential, putrid, asthenic, nervous, adynamic or ataxic fever, never failed to show itself in a city where there were many prisoners of war confined. Whenever the prisoners were removed from one place to another, the pestilence would follow them and spread to those who had intercourse with them in their narrow, ill-ventilated quarters.

At Vilvorde, in 1802, it began in the cold, close, damp dungeons, in which some prisoners were confined as a punishment for intemperance. It spread from the guards to the keepers—from them to the prisoners in the common jail—then to a great number of mendicants and invalids, and finally to the people of the whole village; and out of a population of four thousand, as many as a hundred died in a day. A few drunkards, shut up in a confined dungeon, generated the infection. They were not prisoners of war, but residents of the department of Dyle, who had committed various offences. The village and the department were both healthy anterior to the appearance of the typhus in the dungeons.

Typhus or pestilential fever has nearly always made its appearance in every besieged city. It appeared in Jerusalem when the Romans were besieging it, and at Acre when Napoleon was before it. The besiegment of a city is the most effectual quarantine that could be instituted—as it cuts off all intercourse from without; yet it is during the siege, when protracted, that it is sure to make its appearance within the walls of the city besieged. The certainty of the appearance of pestilence in every place long besieged by a foreign army, is a fact worthy of the consideration of those who are in favor of besieging New Orleans with a rigid quarantine. There is a great deal of true wisdom and benevolence in Dowler's prayer, for "*a harmless Board of Health.*" Pestilence may be created by the very means that those unacquainted with its laws might suppose would be the best to prevent it—or appears to them to be the safest and freest from harm. But as far as a strict quarantine is concerned, experience proves that it is not harmless; but on the contrary, like everything else which obstructs commerce and enhances the price of the common comforts and necessities of life, has a tendency to breed disease among the laboring poor. Pestilence is not only the child of war, but also of all those wretched governments, which in graciously condescending to confer the boon of nominal liberty on the laboring classes, have taken from them every right and privilege that makes liberty valuable or desirable. Typhus or pestilence of

some kind, included under that generic term, is artificially generated almost every year, in every city, of those monarchical and despotic governments, which create want by taxing exorbitantly, either directly or indirectly, all the necessities of life to pamper aristocracies and monopolies, and to put the moneyless classes in their power, to be punished with cold, hunger and nakedness, or to work for a pittance of wages less than what would half feed and clothe a negro. To avoid starvation or being shut up in those white slave depots, called workhouses, where husbands, wives and children are torn from one another and confined in separate apartments of the prison, until a capitalist comes along to hire their services for almost nothing, the unfortunate hirelings often impose upon themselves a greater amount of labor and fatigue, to satisfy their employers or masters, than human nature can bear with impunity. Thus, the pre-disposition to typhus is laid by hard work and an impoverished state of the blood, from a poor, vapid diet of cheap articles, as black bread, turnips, potatoes, etc. Rents being high and wages low, a number of laborers have to club together to hire a lodging room or a cottage. A little fuel, to half-cook the cheapest and most unwholesome provisions, is the most that their stinted wages will allow them to get—and as to clothing and bed-clothing they can scarcely afford to purchase a sufficiency to keep them from freezing in the cold weather of winter, unless with closed doors. Having no means left to purchase fuel to enjoy the luxury of fires, they have to close the doors and windows, and to depend upon the exhalations of their own bodies, in a confined room, crowded with human beings for warmth. These are what are technically called the occasional causes of typhus. The predisposing cause is already in the system, the impoverished blood, from the stomach fed on impure food, and the lungs fed on impure air; the energies of the muscular system being worn down by incessant toil, and the nervous system pinched with cold until it almost ceases to feel. Nature can stand no more. The body of some one or more of this unfortunate class of people becomes ripe for typhus. It is stunned or stupefied, as the derivation of the word, typhus, imports. The nerves almost cease to feel, and a stupor or total indifference to all surrounding things steals over the mental faculties. There is no suffering. The misgovernment of him, or her, sitting upon the throne, has already made the poor victim suffer enough. Nature interposes and strikes the sentient system with apathy. This is typhus—representing several

species of diseases, generated every winter, in almost every city of Europe. When once generated, it is apt to seize on those who are exposed to the occasional causes, the men, women and children, living in crowded tenements, breathing an impure air. It confines its ravages almost exclusively to those classes of persons exposed to the predisposing and occasional causes above mentioned, in all those cities where great attention is paid to cleanliness, sewerage and the speedy removal of all putrescent and fermentable matter. Hence, London, Paris and some other large cities, contain localities more or less circumscribed, where typhus prevails nearly every winter, to a greater or less extent. When bread is cheap there is little or none of it. The price of food, fuel and clothing, and house rents being known—the wages of labor and the temperature of the weather—the number of cases of typhus and the number of deaths, in a given population, can be figured out with so much accuracy, as to prove incontestably, that it is a disease of artificial creation—the handy-work of oppressive governments. America has given Europe a valuable lesson in progressive science, by showing twenty-four millions of people entirely exempt from the ravages of typhus, except in a few ill-governed places, where alcohol is king. Until recently, it was the practice to fly from those parts of a city where typhus made its appearance. But observation has proven, that it is less expensive to eradicate it than to move away. By giving the poor fuel, blankets and clothing, to keep warm, enabling them to let the fresh air into their dwellings, plenty of wholesome food to eat and soap and water to keep clean, typhus is quickly eradicated; provided the general atmosphere of the city be pure. But, if that be foul all classes are liable to it, and in some seasons it sweeps through town and country, following the lines of travel in every direction. It falls upon those places where its predisposing and occasional causes mostly abound; on those which are protected by quarantine as well as those that are not. In close rooms and confined places it is communicable from one to another. But it cannot propagate itself, either by the sick, themselves, or the clothing they have worn, in a well-ventilated atmosphere. Repeated observations have proven, that quarantines, sanitary cordons, and the greatest cleanliness and circumspection have never been sufficient to shut it out from any city in the old world, where bread is dear, fuel scarce, the winter cold and wages low. If a rigid quarantine system could make provisions cheap, feed the poor, and prevent the vital energies

from being overtaken by toil, in the piercing cold or under a burning sun; if it could not only give an abundant supply of water, but afford facilities for running it immediately off after it has fulfilled its hygienic mission of ablution, without permitting it to remain a moment to deposit the organic matter it has taken up; thereby removing entirely all those impurities which contaminate the atmosphere; if it could establish public baths—build houses with thicker walls, better ventilated, with verandas extending over the side-walks, to protect the citizens and strangers from the weather and the scorching sun, when walking out breathing the fresh air of the streets; and lastly, if it could dethrone that tyrannical king—the last of the race of tyrants daring to maintain a foot-hold in this republican land—who annually carries into captivity a greater number of sturdy republican freemen, in the bloom of life and usefulness, by mesmerizing their wills with his ethyl breath, than would be sufficient to found another Republican State, or to hew down the largest army of any despot in Europe—then, indeed, would the rigid quarantine system be worthy of adoption as the most safe and certain method of guarding against pestilence, by eradicating its causes. Experience, however, has proven, that it generates, within the city it is intended to protect, more pestilence than it keeps out. It was reserved for America, by the aid of her great men, Thomas Jefferson, Samuel L. Mitchell, Benjamin Rush, and a few others to devise, and put into successful operation, a system of sanitary regulations which, without annoying commerce or obstructing trade, have proven more successful in protecting all those cities, where they have been adopted, for the ravages of pestilence than the most enthusiastic advocates of rigid and protracted quarantines ever dreamed of deriving from that miserable system, which, for many years, came very near annihilating American commerce. / So far from doing the smallest particle of good or answering a single end for which it was instituted, the experience of more than twenty years proved that the rigid and protracted quarantine system, with its lazarettos, pest-houses, and sanitary cordons, actually seemed to sow pestilence broad cast over every land that adopted it. See 15 volumes of Medical Repository, for accounts of the terrible ravages of yellow fever, every year, in Spain, for twenty years, during the existence of the most rigid quarantines at every port—continued for a hundred days—declaring American cotton contraband and subject to destruction by fire; showing that Spain lost, in a few of her cities, as many

as 124,000 subjects, by yellow fever, in less than two months. See the same work on the ravages of yellow fever, in Philadelphia, during the ten years that her rigid quarantine was enforced—and its disappearance after adopting the sanitary regulations proposed, in the first instance, by Benjamin Rush.

See “Dr. Samuel L. Mitchell’s Report (volume 6, page 460, of the same work,) to Congress on quarantine regulations,” (while he was United States Senator from New York,) for a full account of those sanitary measures proposed by him as a substitute for the rigid quarantine system, which have since proved to be so eminently successful in every city that has adopted them. See vol. 9, Med. Rep., page 227, for “additional restrictions imposed upon American commerce,” by foreign nations, based upon the confessions, proclamations, and proceedings of the American people and town councils, admitting that “they were polluted with a distemper, malignant and contagious beyond all example,” “caused by a subtle venom, more attenuated than the electric fluid, and transportable to all parts of the world.” See circular letter of James Madison, Secretary of State, under Thomas Jefferson to our foreign consuls, written with a view to procure “some relaxations of the ruinous and oppressive quarantines on American vessels in foreign ports.” See, also, Albert Gallatin’s circular, on the same subject, while Secretary of the Treasury, July, 1801.

For the metaphysical abstractions that gave birth to the humbug that frightened half America, and all Europe; (except the Lancashire cotton spinners,) that there were two yellow fevers, a non-contagious kind, in the West Indies, and a terrible contagious Bulam pestilence, in the United States, which the lawless republicans would never be able to get out, as it adhered to cotton wool, and many other things, with great and pertinacious tenacity, see Dr. Chisholm’s work, published the latter part of the last century, immediately after the manufacturers of Great Britain had made the discovery that the cotton, grown in the United States, was the best in the world for manufacturing purposes; particularly the sea islands of South Carolina, and at the very time when Spain and Great Britain were running a race in the cotton manufacturing business. For the ability with which the humbug was sustained and made subservient to British policy, see the transactions and resolves of the colleges and learned doctors of London, Edinburgh and Glasgow, and all the scientific works and learned periodical literature published between

the years 1794 and 1816—for specimens of the most able arguments founded upon metaphysical abstractions to prove the contagiousness of the yellow fever of the United States, and its transmissibility to foreign countries by fomites, which have never been surpassed, except by the arguments built upon another abstraction, with which the British literature of the present day abounds, ignoring facts, and proving by idle romances and fiction the horrors of American negro slavery.

For the views of the British writers, of the present day, on the inefficacy of quarantines, see the *Edinburgh Review* for July, 1853, page 97, and all the late British Medical works on fevers, where the whole system is repudiated as “useless, an incumbrance to commerce, perilling life, fostering and engendering disease, and squandering large sums of public revenue.” They are even condemned as ineffectual in guarding against small-pox. For the fruits of the theory of Dr. Chisholm, a surgeon-general in the British service, published to the world upwards of half a century ago, which frightened nearly all Europe against purchasing American cotton, see South Carolina with but one market for her sea islands to the present day; and see the people of more than half Europe, just beginning to open their ports to American upland cotton, and to venture to begin to spin an article which for ages they were afraid to touch, except with a pair of tongs, and then to burn it, and condemn the ship to destruction that brought it. That “there was something rotten in Denmark,” see vol. 9, *Med. Rep.*, page 231, where the Danish Consul, in Philadelphia, notifies the American people, that his government considered “cotton” (and a variety of other things he gave a list of,) “dangerous, as carrying infection, and that if goods of that kind were found aboard of an American vessel, in the waters of Denmark, she would be sent to Norway, where all the goods of a nature to carry infection would be burnt.”

There is no limit to the evil consequences of letting idle fears and a false theory run ahead of fact and reason. A thing which we incautiously admitted to be *imported*, naturally led Europeans to believe might be *exported*; and hence, in self-defence, to protect themselves from what they supposed to be a real danger, but which was entirely imaginary, they placed the most odious restrictions on American commerce. The doctrine of contagion or non-contagion is founded on abstractions, to which each party has given different definitions or meanings, and like all other questions, whether medical,

scientific, or theological, resting on such a basis, the longer the discussion, the further are the parties from agreeing or understanding one another. The merits of the subject can never be reached by fact or argument until it is removed to a more solid platform, and the old question of contagion or non-contagion lost sight of. Epilepsy and St. Vitus Dance are contagious or not, according to circumstances—so is rheumatism, so is influenza, and almost every other complaint. If epilepsy were a new disease, which Europeans had never seen or heard of, until advised of its appearance in America, and that the Americans believed that it was imported from the West Indies, but that the people of those islands denied its paternity, and accused Siam and Bulam with it, the various European governments, on being fully assured, by their Consuls, of the admitted contagiousness of the new complaint, and seeing exaggerated descriptions of its terrible symptoms, would not be long in establishing the same rigid quarantines, to keep it out of their respective dominions, as those they established to guard against the yellow fever. Epilepsy, however, is an old disease, the extent of its contagiousness is known to the world. Its contagion can be guarded against by an easier method than by quarantines. All that is necessary to avoid the contagion, is to turn the head away, and not to look at the patient afflicted with the malady when in the fit. Even this precaution need only be imposed on extremely nervous and excitable persons. If Europeans knew that the contagiousness of yellow fever could be guarded against, and entirely destroyed by throwing the doors and windows open, they would never think of resorting to the expedient of a rigid quarantine to protect themselves against it, when an hour's ventilation would be all sufficient. Again, if the people of Europe were to hear that a camp fever had made its appearance among a large army of soldiers in New Orleans, who had for six years been receiving fresh recruits from Northern latitudes, that the whole were under bad discipline, and the atmosphere of the city impure, and that this camp fever, after becoming very rife among the soldiers, had attacked many of the citizens—especially the unacclimated portion, it would not excite surprise; because the occurrence of that fever among soldiers, quartered in a city, is an every day affair in Europe. It is also a very common occurrence for a camp fever to extend to the citizens of the place, in which the army is quartered. Nor would it excite surprise or attract attention, to hear that smaller garrisons, of a similar description of soldiers, quartered in the towns

of Baton Rouge, Bayou Sara, Natchez, Grand Gulf, Vicksburg, Mobile, and many other places had also, soon after its appearance in New Orleans, been attacked with the same kind of camp fever, and that it had in some or all those places, spread from the soldiers to the citizens.

If told that in 1852, it had only attacked the new recruits and had spared the old soldiers and citizens, they would not wonder at it at all, because that is precisely what camp fever does in Europe, attacking every year the new recruits, but only now and then extending to the veterans and to the citizens of the place where their barracks are situated. They would not think of instituting quarantines against American vessels to protect themselves against such a fever, because they are well acquainted with it. They know it to be contagious in a certain sense, but they know the full length and breadth of its contagiousness to be very short, and easily guarded against by soap and water, and free ventilation. Repeated experience has proven, that quarantines and sanitary cordons, ever so rigid, cannot prevent the camp fever from appearing among large armies of soldiers, and of extending sometimes to the citizens of the place in which they are quartered, if the surrounding atmosphere be impure.

What is camp fever? "It is an artificial disease, engendered by a great number of men collected together from different quarters, eating and drinking what they have not been accustomed to, deprived of the fresh, cool and bracing air of their homes and the invigorating exercise they had heretofore been used to. Placed in such artificial or unnatural circumstances, an artificial disease is the necessary consequence of their abnormal condition—a disease not occurring on a regular march, but only when wiling away an idle and irregular life in camp. The camp fever, *febris castrensis* or typhus of the armies of Europe, is only an older chip of the same block out of which the yellow fever of the South, at a later period has been hewed by the operation of a new set of causes, subjecting emigrant armies of northern men, with or without guns in their hands, to the scorching rays of a tropical sun. They both belong to the same genus—typhus. They are older and younger brothers. Yellow fever being what authors call typhus icterodes, the youngest of the family, which is quite a large one. Every species of the whole genus are artificial complaints.

To America belongs the honor of having swept the whole of them, with the exception of the youngest, out of every nook and corner of her free land, where true republicanism has swayed her benign sceptre, unincommoded and unawed by the tyrant Alcohol. The ship fever, another species of the genus, typhus, has been destroyed by limiting the number of passengers—by a good diet, proper cleanliness and ventilation on board. Foreign ships often bring that disease to New Orleans, among the emigrant passengers—a disease artificially generated on the voyage. Another species of typhus artificially generated in prisons, penitentiaries, asylums, houses of refuge, schools, etc., by over crowding, want of cleanliness, an impoverished diet, insufficient clothing, and abnegation of the common comforts of life, has been nearly annihilated in this country, by the hand of progressive science. Yet this disease, under the name of jail fever, is very common in the non-progressive governments of monarchical Europe. The nervous, the slow-nervous, the adynamic typhoid, the typhus gravior and typhus mitior of Great Britain and Ireland; and, also, the putrid fever of Hoffman, which continues to be the terror of the laboring poor of the old world, sweeping off three-fourths of the toiling millions, are proved to be the artificial creations of bad governments, by their being seldom or ever seen in the model Republic. The putrid fever arises from the necessities of the poor, compelling them to eat spoiled provisions, and such things as the dogs of the American negroes would refuse. An eminent Baptist preacher, Malcolm, found the British Hindoo subjects subsisting on cotton seed, soaked in water, in his travels through India, some few years since. He was a northern man, unacquainted with our cotton region, and mentioned the fact of cotton seed soaked in water, being used as a diet in India, apparently as a matter of information that might be useful, or turned to practical account by his brethren in our Southern States. But they can tell him that cotton seed are so unwholesome, that the butter made from the milk of cows, that feed on it is not fit to use, as an article of diet.

Adynamic fevers, with gastric derangements and softening of the tissues, called by the humoral pathologists “putrid,” all being species of typhus, desolate British India. They are the artificial creations of that oppressive government which has robbed the people of everything except the name of freemen, and driven them to eat such unwholesome food as cotton seed or starve; a government which can see no evil in anything but American negro slavery. Whatever may

be said against American negro slavery, it has, at least, freed the slaves from every species of typhus. It has done it by meat and bread, blankets, warm clothing, good fires, and by exacting no more than a reasonable service in return, for all the substantial comforts of life; thus proving that typhus is artificial and not essential. The British typhus, so fatal to the overworked, squalid poor of England, and which is depopulating Ireland, is so clearly an artificial malady, that it rises and falls with the price of wheat. American republicanism, guided by the unpretending inductive sciences, has banished, one after the other, nearly the whole batch of those artificially created typhus plagues or pestilences, which, for countless ages have been reveling in the blood of the toiling millions of the old world.—One of them is left, driven from the North by the great Rush and Mitchell, it has fallen upon the South, and in one short season made ten thousand victims in New Orleans. As the whole tribe of typhus plagues, yellow fever included, is the spawn of despotism, ignorance, vice, wasteful extravagance, high taxes, poverty, filth and a disregard of nature's laws, they can only be extirpated by extirpating their causes.

The supposed case of a large foreign army in New Orleans, which had been six years gathering together—under very lax discipline, and among whom the camp fever appeared, extending to the neighboring garrisons and falling upon the citizens, precisely as it did in the long wars that France sustained against all Europe—it is now time to metamorphose into a real one. It is true, that the individuals composing that vast army of emigrants, which have for six years been congregating in new Orleans and the neighboring cities and villages, had no guns in their hands, no officers, no uniform, no regulations in regard to diet or drinks, no regular hours of repose and exercise, and under no discipline; yet they were here. In numbers, they were like the locusts of Egypt. They greatly outnumbered the American armies that conquered Mexico, and revelled in the halls of the Montezumas. They congregated at New Orleans from all parts of the civilized world, inhabited by the white man of the North of Europe, but chiefly from Germany and Ireland. Many of them brought their women and children with them. Their principal rendezvous was in that part of the city where the late epidemic first broke out and committed its greatest ravages. They were nearly all as poor and destitute on their arrival as poverty could make them. The despots of the old world had robbed them and their fathers be-

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fore them of everything, not leaving some of them a second shirt.— They depended upon their daily labor for a subsistence. They found few or no shops, carrying on various handicraft employments, open to receive them, where they could work in the shade and be protected from the scorching rays of the sun. They were sufficiently numerous if such shops (which have built up Philadelphia and Cincinnati) had been open to receive them, to have made New Orleans rival both those cities in small trades and handicraft employments. The only shops they found open to receive them were the grog shops. Hence they had to turn out in the broiling sun, to work for wages at the most laborious kind of drudgery, on the levee, in the streets, and all other hot and exposed places. Soon many of them were seen carrying bricks and mortar up to the fourth story, exposed to a mid-day's sun, near the summer solstice of a Southern climate.

The wealthy capitalists, forgetting that true republicanism, (that kind which can banish plagues,) requires them to make the comfort and welfare of the laboring classes the governing principle in spending their money, have chosen the summer season, par excellence, to build houses to be ready to rent, in the fall and winter. The city authorities paying no attention to the long war of thirty years duration, *quorum pars magnum fui*, which Professor Merrill, of Memphis, has carried on against all those who would stir the earth of our towns and cities, in the summer time, with a hoe or spade, no matter how pure it may be, put a very large number of the emigrant army to pulling and hauling the filthy mud of the streets and gutters about; the most unhealthy work for the operators, and the most efficient means that could be adopted to fill the city with clouds of miasmatic vapors, if there be any truth at all in Dr. Merrill's doctrine. The emigrant army, working for wages, exposed to the sun in performing all kind of laborious drudgery, were breathing an atmosphere much more rarified than that which they had been accustomed to in their native country. They had, consequently, not their accustomed supply of oxygen to carry on the vital processes in all their wonted integrity; an insufficient supply of oxygen, by breathing an air of a high temperature, slackens the functions of the lungs, and prevents the due elimination of carbonic acid from the blood. The ingestion of alcohol has the same effect, and conspires with the high temperature to obstruct the elimination of decomposing matter generated within the system. Moderate labor, in a comparatively cool atmosphere, is healthy, by enabling the system to free itself of the effete

matter which is constantly generating within the body. But hard labor in the hot sun causes a rapid degeneration of the tissues within the body of the white man, and an accumulation of azotized compounds and other effete substances, which nature has made no extra provision for throwing off as she has in the body of the negro. In the negro they are eliminated by his enormous liver and by the peculiar construction of the skin, and when hard at work in the burning sun, the effete matter, thus thrown off, taints the air with a strong muskrat odor a great distance around. This physiological fact, the rankest abolitionism, which ever tried to push the happy negro from his stool in this Southern climate, and to victimize the white man upon it, cannot deny. It sticks in the nostrils—no logic can dislodge it. Towards the close of Dr. Samuel L. Mitchell's life, he wrote to me to ascertain the temperature of the open air in the summer's sun of our cotton fields, roads and streets, unprotected by shade. He said the thermometer told him the temperature of the shade in the South, differed but little from the temperature of the shade in summer weather at the North. He conjectured that the difference of temperature, between the sun and the shade in the South, would be much greater than between the sun and shade at New York, in the North. His conjectures were proven to be correct by actual experiment, made by him at New York and by me at Natchez. The difference was much greater than he had supposed. He wanted further observations by thermometers exactly alike in construction. But before they were obtained news arrived that the great Samuel L. Mitchell, of New York, was no more. The investigation was dropped, but I learned enough to come to the conclusion, since confirmed by many years of observation, that the summer's sun in this climate is too hot to enable any white man to labor long in it and live. On the other hand, observation proves that labor in the shade, not requiring too much muscular exertion, is healthful and beneficial. All those sanitary measures, therefore, which may be instituted to protect New Orleans against pestilence, would be incomplete and ineffectual, unless the practice of making negroes out of the master's race of men, and turning them out to labor in the hot summer's sun, be abolished. When the late epidemic made its appearance, a large portion of the whole army of emigrants, at work at all, were laboring in the sun. Those who had last arrived from Europe being the poorest and the most needy had the roughest and hardest kind of labor imposed upon them. Being just from a long sea voyage, they were

debilitated and their blood scorbutic, as could be seen by their spongy gums, receding from the teeth, giving the latter organs the appearance of gourd seed stuck in the alveolar process. In such a state of the system of such persons, hard labor in the hot noon day's summer sun of this climate, might justly be characterized as manslaughter. The poor emigrants had left behind them the cold bracing air near the arctic circle, but they brought with them many bad habits which had been forced upon them and their forefathers by the despotisms from which they had fled—not the least of which was the habit of crowding together in small, confined rooms, to lessen the expense of rent. One room often serving for one, two, or more families.—Many of them slept on the naked floor, which scarcely gave sufficient space for them to lie down. The old habit of closing the doors and windows to keep the cold out, they still adhered to, to keep the night air out. Although they get good wages—sufficient to enable them to rent more comfortable dwellings—yet they found themselves in a city very much like those of the old world, where the common comforts and necessities of life are exorbitantly high, owing to the high taxes imposed upon the citizens without their having anything to show for them in return—nothing free—not even water, without paying a Company a high price for it—the Company not taking the trouble to filter, settle or purify it, but furnishing it in a crude state, containing about half a pound of mud, and foreign matter to the gallon, and being entirely unfit for cooking, washing or drinking, unless the purchaser take the pains to purify it—a troublesome business on a small scale, but which could easily be done on a large one before the water is distributed. To add to the misfortune of the emigrants, they found very few fresh and wholesome vegetables in the market, which persons from a long sea voyage so greatly need. The stalls of the market being taxed, the gardeners cannot afford to raise the vegetables and pay the tax. Their blood being in a bad state from the sea voyage, and a want of fresh, antiscorbutic vegetables, exposure to the sun brought out the prickly heat in such abundance as to thicken and disorganize the skin ; preventing the effete organic matter generated in the system from duly passing off by insensible perspiration—causing great irritation of the nervous system, and loss of rest at night from the intolerable itching, burning and smarting, attending that complaint in its aggravated form. While the comforts of life, even that of a glass of clear water, were shut against them, the doors of more than a thousand grog shops were

open day and night, tempting them into dissipation. The use of alcohol in any form is known to diminish the quantity of oxygen consumed, and to prevent the normal elimination of carbonic acid by the lungs; thus conspiring with the high temperature and the impure, confined air of their lodging rooms, to retain the noxious carbonic acid in the circulating system, and preventing the effete organic matter from being thrown off. Together with all this, the general atmosphere of the city was impure. But if it had been as pure as the granite hills of New Hampshire, it would have availed them little or nothing, because the dens and hovels in which they had crowded themselves, contained the most impure atmosphere imaginable; being filled with the confined effluvia of the human body itself. The night closets exhaled the same kind of effluvia; many of them not having been emptied for years. The cleansing out of those noxious depots, the most noxious of all in the city, is not a public hygienic measure as it should be; but, if done at all, imposes a tax of from ten to twenty-five dollars on every tenant; who generally neglects to do it or is not able to incur the expense. If the dead animals and other nuisances in the streets, which caused so much complaint, had been ten times more numerous, they would not have been equal as a source of disease to the depots of confined animal matter, just alluded to. Animal matter in a state of putrefaction in the open air, *in this climate*, if not entirely innoxious, as Dr. McFarlane, Professor Merrill, and a number of very high authorities in medicine contend, is at least so in comparison to that which is undergoing decomposition in confined, stagnant reservoirs, sufficiently close to exclude the admission of the air, but not enough so to prevent the external atmosphere from being polluted by the noxious gasses arising therefrom, as was the case with the decomposing animal matter in the centre of the neighborhood in which the yellow fever of 1823, originated, and around which it gradually spread, until it desolated Natchez. That year New Orleans had but two cases of yellow fever and but one death; which occurred during the prevalence of the most terrible epidemic that ever afflicted the City of the Bluffs. Organized matter, when confined, is apt to become fungoid. As far back as the days of Moses, fungoid matter generated in an unventilated house, in Scripture language, "plague spots," has been considered as poisonous.

If Moses had been the Mayor or Governor of New Orleans, at the breaking out of the late epidemic, he would have made sad work of the houses occupied by the emigrants, where the disease first ap-

peared. Some of them certainly contained a mould or spots of discoloration on the walls, which would have doomed them to destruction. Even the old shoes and things of that kind found in confined rooms, looked as if they were covered with frost, being white or green with mould; while the summer solstice was approaching, the heat of the weather became more intense. At length, a number of emigrants, just from Ireland and Germany, fell the first victims to that artificially created disease, the yellow fever. The first one died on the 27th May, in the Hospital, on the day of his admission. His name was John McGuigan, an Irish laborer. He had only been one week in the city. He came to it direct from Liverpool. His was a clear case of yellow fever, with black vomit, imported from Liverpool, if imported at all. Three days after, Bremen contributed a case in the person of Gerhart H. Woerte, a sailor. Seven days elapsed, when Ireland contributed another—Michael Mahony—from Liverpool. The same day, Bremen offered up another sacrifice—Herman Brantz—just from that city. Three days afterwards, the 10th June, Old England contributed a case in the person of Thomas Hart, from Liverpool. The next day, New England, not to be outdone, brought in a sacrifice under the black vomit flag. The same day that England unfurled that flag to the breeze, the ship *Evangeline*, from Jamaica, came into port with the same flag flying from her masthead. Fifteen days afterwards, viz: on the 25th June, the bark *Mary H. Kimball*, from Rio de Janeiro, came into port under the same flag.—Jamaica and Rio have each been accused of giving New Orleans the yellow fever. If they did, Ireland, Bremen and England should not be held guiltless, as they were all ahead of Jamaica and Rio, in beginning the mischief. Even New England had a victim dying with the *el vomito*, though not dead, when the first of the two vessels arrived. Rio, however, has been accused of sending us a contagious kind. But when the *Mary H. Kimball* arrived from Rio, on the 25th June, the yellow fever, we already had here, was gradually spreading in every direction around the black vomit standard, that Ireland, Bremen, Old England and New England had previously hoisted over the heads of that vast army of emigrants quartered in the vicinity of the Triangular Buildings. By referring to the July number of the *Edinburgh Review*, for 1853, it will be seen that the Rio yellow fever, if ever so contagious here, was not contagious there; because it did not spread to the citizens of the neighboring towns of Persopolis, although the sick from Rio were carried there with the

Rio yellow fever. There was no emigrant army in Persopolis to mould the abstraction, called contagion, into a substantial form, as there was in New Orleans, with detachments in Mobile, Baton Rouge, Natchez, Grand Gulf, Port Gibson, Vicksburg and other places.—During the month of June, 46 deaths from the disease occurred. It continued to spread like a fire, gradually around its original focus. All other parts of the city were entirely free from it, except a focus subsequently formed in the lower extremity of the city, containing great numbers of poor, destitute persons. Even up to the middle of July, a month and a half after its first appearance, it had made so little progress in coming down town, that the radii from the upper focus had not reached Poydras street, and those from the lower focus had not crossed Esplanade street, leaving seventeen intervening streets untouched. So entirely exempt were those intervening streets from any taint of the infection, up to the middle of July, that I wrote to an esteemed friend, whose lady was at Pass Christian, while he and the children were on his plantation up the river, that the family could meet together in perfect safety at the St. Charles Hotel—informing them that the fever was in town among the emigrants, but not in that part of the city. The family met together at the St. Charles Hotel, on the 18th July, and none of them took the disease. Up to the first of August it was so strictly confined to the emigrants and newly arrived unacclimated persons within the infected districts, or who had visited those parts of town, that I could hear of no deaths among the citizens proper, or among the negro population. The editors of the Delta will remember that I requested them, during the first week in August to advertise to ascertain if such a case had occurred; although upwards of two thousand of the stranger population had already fallen. But the request to advertise had scarcely been made, when the disease clothed itself in all its terrors, striking down every one who came in its way—sparing neither man, woman nor child who had not had it before, or been here more than six years. As soon as it passed from the emigrant army to the citizens, it rapidly spread over the whole city—apparently leaving untouched, or touching very lightly, the occupants of the last row of buildings next to the swamp. Yet it spread, to my knowledge, up the river, three miles above Carrollton—where I had seven cases in one family—all of whom recovered, and while people were wondering if it could be the yellow fever away up there, four cases occurred in a neighboring family—nothing was done—no danger was apprehended

—the disease not being suspected until the third day, when a neighbor visited the house and found three out of the four lying dead in their beds.

Early in the epidemic I visited the disease in its head quarters, and had an opportunity not only of seeing it, but of seeing its causes. A young Pennsylvanian, who had rented a lodging in a three story house in that dirty part of town between the Triangular Buildings and St. Mary's Market, was attacked with the yellow fever and sent for me. Soon after he had rented the room, the other vacant rooms were rented by a swarm of newly arrived emigrants, filling them completely, and leaving no space on the floors unoccupied, after disposing themselves for sleep at night. Passing by the doors of the other rooms they were seen to contain a great number of persons, of all ages and sexes. Some were sick, some cooking, others eating, and the largest number drinking whiskey, all in the same room, not sixteen feet square, with windows not only closed, but cobwebs showing that they had not been opened from time immemorial. A foul foetid vapour, which not only offended the olfactories, but seemed to stick to the palate, issued from those dens and the filthy privies in the back alley. On regaining the street, one of the most filthy of those which the newspapers were blaming as containing the seeds of the infection, the relief afforded to my respiration told me that the press had fallen into a great error; that it was not that dead dog or that poor cat putrifying in the open street, which caused the New Orleans plague, but it told me that I was right in the paper I wrote twenty years ago, proving by the greater speed with which oxidation takes place, and matter decomposes and enter into new combinations, in the open air, in the locality of New Orleans—covering stagnant pools with plants—and the greater freedom of rain water from organized matter than elsewhere, that it is among the most healthy locations for a great city in the world; it told me that it was not matter in the open air, but that which was confined in those temples of Cloacina and in those over-crowded, unwashed, filthy rooms, excluded from the air and filled to suffocation with human beings—themselves full of disintegrated azotized and other compounds—that caused that artificial form of typhus, known as the yellow fever. If New Orleans were founded on a rock of granite, and the streets were jasper, it would be folly to hope to escape the yellow fever, so long as such a combination of morbid causes, as those just mentioned, are permitted to exist. I was much aided in curing the patient, after I suc-

ceeded in getting the windows open, by bringing that powerful artillery, heaven's fresh air, to bear upon the enemy. Yet such is the force of prejudice, that the poor emigrants seemed to prefer dying with the doors and windows closed and covered with blankets, rather than to open them and live. Dr. Dowler informed me that more persons died in that part of the town than the supposed number of inhabitants. They were so closely huddled together, it would have been a difficult matter to have enumerated them. It has been ascertained by Dr. Dowler, that in the present and in all former epidemics, the prisoners in the common jail have invariably escaped the disease. This is an important fact, as it goes to show that houses with very thick or double walls, like the jail, would be, so to speak, fire proof against the ravages of an epidemic. Double-walled houses, or those constructed on the principle of ice, by preserving an uniformity of temperature, would no doubt prevent yellow fever if the tenants remained in them and did not expose themselves to the sun.

The new custom house, now building, will probably be a safe asylum against the yellow fever. But the architecture of houses generally, is so faulty, that many of them are more like ovens in the hot part of the day than comfortable dwellings. As exposure to the sun is both a predisposing and an exciting cause of yellow fever, the covering of the entire side-walks with verandas or galleries, as in Bologna, would greatly tend to prevent the disease. The substitution of the Parisian *cabinet d'aisance inodore*, for the noxious privy would be a most desirable improvement. Public baths, better water, (viz: purified of its dead and other foreign matters before being distributed,) and better facilities for running it immediately off, are improvements greatly needed to promote health and comfort. The vicious practice of a large portion of the nurses, of closing the doors and windows of a sick room, greatly tends to spread the disease to other members of the family and diminishes the patient's chances of recovery. In a close unventilated room, matter in a state of decomposition is introduced, at every breath, into the system; of which decomposing matter the patient already has more than he can well eliminate—and if the attendants have as much as they can throw off, the introduction of more tends directly to produce disease. A patient in a perspiration, if the bed clothing be well adjusted around him, has nothing to fear from the fresh air—as its respiration will promote, rather than arrest a salutary sweat. The yellow fever is never communicated in a room properly ventilated. In a close room any disease is apt to

communicate itself or some other complaint in its stead to susceptible persons. All means to prevent the occurrence of the tropical typhus among us will be ineffectual unless nature's laws be better respected. Nature scorns to see the aristocracy of the white skin—the only kind known to American institutions—reduced to drudgery work under a Southern sun, and has issued her fiat, that here at least, whether of Celtic or Teutonic origin, they shall not be hewers of wood or drawers of water, or wallow in the sloughs of intemperance, under pain of three-fourths of their number being cut off.—Until this immutable law, which has made the white race rulers and enjoined on them a life of temperance and self-control, to qualify them for the high and responsible trust, of preserving in all their purity those wise institutions founded on virtue, economy and the fitness of things, bequeathed them by Washington and the sword of their fathers, be properly respected, the deaths arising from its violation will continue to swell the bills of mortality, and to lead the world into the error that New Orleans is a most sickly location.—Whereas, the truth is, that apart from those who disregard the law just alluded to, and consequently furnish the fire and fuel to kindle epidemics and keep them in action, there is no city in the Union more favorable to health and longevity. The late terrible epidemic, which spread from the emigrants to the citizens, has only, in a few instances, affected those whose home has been here for more than six years. Northern emigrants, by exposing themselves to the hot summer sun of this Southern climate, by out-door labor and drudgery work, and vitiating their blood by intemperate habits, become so strongly predisposed to yellow fever as to fall into that complaint without the addition of any other apparent cause. Hence we have cases of yellow fever every year, and their proportion bears a very close relation to the number of unacclimated persons who attempt to jostle the negro from his stool, and to take from him those out-door, laborious employments in the sun, wisely given to him as a precious inheritance to lift him up from brutish barbarism upon the platform of civilization, by forcing him to expand his lungs and oxygenate his blood.

New Orleans should not be less careful of those young men and young women, flying from despotism and seeking homes and employment among her citizens, than the planter is of the people under his patriarchal government. The newly arrived he never puts at hard, rough work, until they become disciplined and trained to regu-

lar habits and get accustomed to climate. She could better afford to cherish, instruct and discipline the emigrants in the hidden mysteries of true liberty, (which is but another name for health, industry, knowledge, temperance and virtue,) considering they cost her nothing. Without some pains be taken with the newly arrived emigrants, experience proves, that the larger portion become a tax and a burden, instead of aiding in building up the Southern emporium into a vast city, as they would do, if met on the levee with the Maine Liquor Law, and properly provided for with the thousand and one, light handicraft employments, this climate is so well adapted to; such fancy trades, as have made Paris, France; where they could work for wages in the cool shade, live healthy, happy, and grow in knowledge, virtue and in this world's goods, until able to set up shops of their own and to open their doors to the swelling tide of European journeymen and apprentices. There is an element in that portion of the New Orleans population of French, Spanish and Italian origin, which is not found in the same perfection among any other people in America. That element is taste—a delicate refinement—grace—a keen perception of the beautiful—a passion for the fine arts, and a love of elegant and becoming costumes, trinkets, gewgaws and jewelry. With proper encouragement from the city government, it could be turned to practical account, and half New Orleans be converted into a magnificent bazaar, by those handicraft employments and fancy trades, which are, at present, almost exclusively confined to Paris, Geneva, Venice and Rome. New Orleans would have no rival in America; because it is only within her limits that the requisite element is found, in a sufficiently perfect state, to give birth to those beautiful creations of fancy which adorn Paris and the cities of Southern Europe. The capital of that portion of our population mostly consists of houses and lots, so greatly depreciated in value, as scarcely to pay the exorbitant taxes imposed upon them. The owners are lacking in energy and disinclined to what is called enterprise. If they were to set up any of the fancy trades, alluded to, they could not retain their apprentices or govern or direct their journeyman without the proper legislative aid from the State and city governments. With that aid—costing the State and city nothing—but the enactment and enforcement of wholesome laws, (founded upon the fitness of things and the necessity of the case,) an abundance of employment, consisting of light fancy work, in the shade, could be given to all the young emigrants, male and female, arriving

in this port, which would greatly benefit the emigrants themselves, assist in making New Orleans a great city, and at the same time by banishing the necessity, at present impelling them to seek coarse drudgery work in the sun, would prevent the yellow fever. Experience proves that the newly arrived Northern emigrants laboring in the sun, especially if their habits be bad and their lodging apartments close and unventilated, can generate the yellow fever anywhere in the South—on barren rocks or sandy plains. That disease is not inherent in the soil of any particular locality, but is an artificial complaint, like typhus or camp fever, which can be driven out from any locality whatever, by a wise and cheap republican government—not only seeking the greatest good of the whole number, but the greatest good of the whole number. Our present oppressive anti-republican system of exorbitant taxation, puts the comforts and conveniences of life beyond the reach of those vast hordes of emigrants constantly arriving in this city, stripped of everything and perfectly destitute. Finding no ready employment, except coarse, rough drudgery work in the sun, which their feeble health, from a long sea voyage, disqualifies them to perform, they sink down to a depth below observation, hiding themselves in alleys and dens of vice, ignorance, filth and misery; where the seeds of disease are in constant fermentation; where they are constantly dying and swelling the bills of mortality, summer and winter, without any one being sick—at least any one known as a citizen. The physicians of the city seldom or never see them—they are sunk too low in ignorance to know the necessity of calling in medical aid when ill, and they are too poor to buy food, much less physic—and if they had it, they are too ignorant and obstinate to use it. There is scarcely a city in Europe which could show as many wretched, destitute poor crowded together in the same space, as that part of New Orleans, where the late epidemic broke out and committed its greatest ravages. While the bills of mortality were running up to an hundred and fifty a day, no one seemed to know anything of the people who were dying. So deep were they lost to the eye of observation, that the members of the Howard Association and other charitable persons, among whom were the physicians themselves, had great difficulty in finding them before death had struck them and made them his own. But for the almost superhuman charitable exertions of the citizens of New Orleans in their favor, the figures of mortality would, no doubt, have run up to twenty or thirty thousand instead of five, before the relief, from the

generous hearted American people throughout the Union, began to come in. With that opportune and welcome aid, the epidemic was disarmed of most of its terrors, and its mortality limited to about five thousand more, making a little upwards of ten in all, which would otherwise have swept nearly the entire population of the unacclimated poor—in numbers, perhaps, exceeding seventy thousand. That it was an artificially created disease, engendered by the ills of extreme poverty, is proved by the fact, that as soon as the American people reached out their hands, scattering the comforts of life among the poor, destitute emigrants, the terrible scourge began rapidly to disappear. That there should be some instances of its having been, to all appearance, communicated in close apartments, is not a matter of wonder to any one acquainted with the laws of that class of diseases belonging to the genus typhus—as they are all more or less communicable, under certain circumstances, in a confined atmosphere.

It is all a delusion that a quarantine, ever so rigid, can protect New Orleans against yellow fever, while causes continue to exist in her midst, more than would be sufficient to create plague or pestilence in any other city in the world. High taxes are at the bottom of those causes, and the toleration of intemperance and idleness is at the bottom of the high taxes. In 1821, the rigid quarantine system was tried, and continued in operation four years. On the 19th of February, 1825, the Louisiana Legislature repealed the quarantine laws, and directed the grounds belonging to the establishment to be sold, It had proved to be ineffectual. The very next year after its establishment, the city was scourged by a severe epidemic. It was at first supposed that the fever had been imported from Pensacola by eluding the quarantine, coming in by the Bayou St. John. But it was ascertained by the Surgeon of the United States Army, that the first case of yellow fever in Pensacola, in 1822, came from New Orleans a month previous to its alleged importation from Pensacola.

In the first sentence of this essay on Political Medicine, (a science in its infancy,) written by snatches, amidst the labors of professional business, I alluded to a short, cheap and safe way of preventing yellow fever, which has never been tried in New Orleans. The best measures, in my humble opinion, to prevent its generation within the city, have already been glanced at, and it now only remains to say what that short, cheap and safe way is, which can prevent its introduction from abroad—admitting, for the sake of argu-

ment, that it can be introduced in that way and spread to the inhabitants. It can be told in few words. It is simply to insulate the shipping with well acclimated negroes, and to let no other class of people act as stevedores, or to come within a specified distance of the wharf—precisely as small-pox is insulated by those who have had the disease in the natural way. Negroes are perfect non-conductors of yellow fever. Whereas, if there be any thing contagious in that malady, (and it is admitted there may be, as in other species of genus typhus, when shut up in a close room, or in the fore-castle, or between decks of a ship,) to admit newly arrived emigrants to act as stevedores, or as draymen, to handle the packages before they are sufficiently aired, would be as dangerous and as cruel to send ignorant persons with gunpowder in their pockets to handle hot ashes. The insulation of the shipping, by non-conductors at the wharf, would be more effectual than the most rigid quarantine at Fort St. Philippe, or anywhere else. Besides, it would have the merit of involving no expense, and of throwing no obstructions in the way of commerce.

To prevent the yellow typhus from originating among us, let pure republicanism be called into requisition, to prevent the ills of extreme poverty and its train of attendants, vice, ignorance, intemperance, idleness, exposure to the sun by day and crowding together in small, filthy, close rooms at night; should it nevertheless spring up, to prevent it from spreading, give it air and scatter republican comforts among its victims, and insulate them by a cordon of non-conductors, in the shape of negroes.

Canal-street, Sept, 30th, 1853.

We copy the following article from the Virginia Medical and Surgical Journal, for which it was translated by its editor, Dr. Otis, from the *Revue Medicale*.

The length of the paper and the room which it occupies will be compensated by its intrinsic merit and the great practical value of such an article on so important and practical a subject. We give about one-half of the essay in this issue, and the remainder will be found in our next Number.

ART. II.—*Memoir upon Typhoid Fever and Typhoidism.* By J. B. CAYOL, *Formerly Professor of Clinical Medicine to the Faculty of Paris, Member of many Learned Societies at Home and Abroad, etc.* Translated from the *Revue Medicale*.

Les systemes en Medecene sont des idoles auxquelles on sacrifie des victimes humaines.

The good sense of the public is more and more shocked by the mortality of prevalent diseases. Each day witnesses the death, in all classes of society, of youths or of persons in the prime of life, who, after having always enjoyed perfect health, and while living under the best hygienic conditions, are suddenly cut down by a fever attributed to a chill, or some other common-place cause of ordinary disease. If one enquires the reason of these unforeseen deaths, the response is always the same—*Typhoid Fever*. This newly invented epithet has acquired, during the last few years, a deplorable popularity; it resounds every where as a funeral knell, spreading terror among the people, especially among the inhabitants of the country, and exerting, from this fact alone, a powerful influence in aggravating the prevailing diseases. Among the educated classes, persons began some time since to bethink themselves, and make enquiries; and now, in the conversations of drawing-rooms, we hear questions springing up, to which the *typhoidian* physicians respond with great embarrassment. It is recollected that formerly, at a period not very remote, the prevalent diseases were fevers which were designated, according to circumstances, by the names inflammatory, bilious, nervous, putrid, malignant or ataxic fever. No longer hearing these fevers spoken of, they ask in society what has become of them. For they regret them, and they are right in regretting them; for these names gave every one a general idea of the nature of the disease, of its gravity, its danger, and even of the line of treatment which was applicable to it. Persons knew tolerably well what they had to fear or to hope. It is quite different now-a-days: When a fever has lasted more than seven or eight days, and some doctor or other has inflicted on this fever the name *Typhoid*, there is nothing to be done but to bow the head and to await the decree of destiny. For the typhoidian physician is essentially and necessarily a fatalist; inasmuch as he cannot become typhoidian without discarding all tradition, and repudiating the heritage of those grand intellects that have rendered medicine illustrious, he has

no guide but his individual reason, which is often very shallow. He is a pilot without a compass, who nevertheless professes to direct you through a sea bristling with rocks and abounding in pearls! Ask of a typhoidian physician upon what principles, upon what rules he bases his treatment of typhoid fever? If he is sincere, he will reply that he does not know. If he hesitates to answer you, then interrogate his official teaching and his works; they will tell you that, *in the present state of science*, (that is to say, their science—science as they understand it,) nothing is known of the treatment of typhoid fever; but that a remedy is now sought, and will perhaps be found.

Meanwhile, until it is found, we may treat typhoid fever indifferently by blood-letting, by purgatives, by tonics, by quinine, by opium, or even not treat it at all; because, according to certain professors of typhoidism, whatever is done, whatever treatment is adopted, typhoid fever is unaffected; it follows its course imperturbably. Is not this the fatalism of the Musselman! Let us add that fatalism characterizes the practice as well as the theory of the typhoidians. We might cite great hospitals in Paris, in which physicians occupying the highest stations as official teachers, do not treat the patients affected with typhoid fever, but abandon them to their unhappy lot, or else make use of them for some therapeutical or chemical experiment.

Such is the faithful summary of what is written, taught and practiced, as regards typhoid fever. It is not difficult to comprehend how typhoidism has become so popular—how it has been so rapidly propagated from the cities into the country, and how, lastly, it has in so short a time dethroned gastro-enteritis. It is because no system was ever more convenient for the superficial and ignorant. The system of gastro-enteritis had already greatly simplified the subject of fevers, by admitting but one disease and one mode of treatment; this was the cause of its popularity. Typhoidism simplified the matter still further, by admitting only one disease, which might be treated according to one's caprice, or not treated at all; and this is why it became more popular still than Broussaism. The most idiotic tyro, when he had named, or, as they term it, *diagnosed* a typhoid fever, found himself on a level with the medical celebrities of the epoch.* Whatever he did or refrained from doing

* An expression consecrated in the writings of the coterie *mutual admiration*.

in the way of treatment, he was justified beforehand by the authority of the most eminent typhoidians. If the patient died, *that* was perfectly simple : he had a typhoid fever to which he was inevitably doomed to succumb ! If he recovered, what a noble triumph for the medicaster, even when he had perhaps arbitrarily imposed the name of typhoid upon a simple and benignant fever, as is constantly done !

How could it be otherwise with such a system that it should be embraced with eagerness by the mediocrities and nullities who always form a large proportion of the medical profession as of every other ? It must be admitted that even without descending so low, typhoidism could not fail to have numerous partisans. If the system is well adapted for the officers of health in the country, who, for the most part, are not guilty of much devotion to study, or of great intellectual effort, it is not less advantageous to the physicians in vogue in great cities ; for those especially, who, indulging in the luxury of fortune as well as the duties of the profession, are always busily occupied, and cannot practice medicine except by the watch. Instead of consuming their time in investigating the character of a fever by profound study of its exterior causes, of its symptoms, its progress, its tendencies, and above all, its relations with the reigning constitution of disease ; instead of laborious exploring, in each particular case, all the sources of curative indications, they pronounce the sacramental words *typhoid fever*, and all is said. They are not afraid, at all events, of being deceived in this diagnosis, because they have admitted in principle that every continued fever is typhoid which is not symptomatic of a local inflammation or of a cutaneous eruption.

They are always ready, however, to admit that they do not know what typhoid fever is, and if it is really a *special fever* ; but they persist none the less in always seeing every where *typhoid fever*, or as they say more willingly, *the typhoid affection*, (*la typhoïde*,) for the word *fever* displeases the adepts of the materialist school, and they strive more and more to banish it from their language. During a few years of enthusiastic success, *gastro-enteritis* supplied the place of fever. Now, *gastro-enteritis* is no longer heard of ; it has quite gone out of fashion, and *la typhoïde* has replaced it. Instead of saying, as in old times, *I have a little fever*, or else, *I have a slight gastro-enteritis*, one will say, to give himself the air of a man of progress, *I have or feel a little typhoid*. * * Oh ! admirable discovery, and how greatly should the sick rejoice at it !

Così va il mondo! So goes, we will not say the whole medical world, without exception, but the fashionable medical world, that which is in the possession of the professorships, which perorates into academies, which fabricates fine octavos of loyal and saleable weight, which is always agitating in the name of progress, and which has never originated a single progressive idea.

It is a striking thing and well worthy of remark! This medical world to which we are referring, is far from being homogeneous, for it is composed of almost as many sects as there are individuals who lecture or write: there may be noticed pure anatomo-pathologists or organicists, eclecticists, numerists, dabblers in chemistry, and mechanicalists. Ah well! all these little rival sects join in a chorus of perfect harmony as regards typhoid fever. One would say that they had adopted this trite epithet as a neutral ground, or as a haven of refuge to shelter their common ignorance of pyretalogy. Observe, nevertheless, that this unanimity applies only to the denomination of the disease; as soon as the question of treatment is started, there is as much discordance as there was harmony before; separations take place immediately, and each one assumes his individuality. Then the question is, who shall show the greatest number of typhoid fevers cured by his method, by his own peculiar plan, a plan that has not been taught him, let it be well understood, but that he has invented; that is the capital point. After having unanimously recognized, or at least proclaimed, that typhoid disease is always of the same nature, they treat it in the most opposite modes; this one by bleeding *coup sur coup*, the other by purgatives at the commencement, a third by chlorides, a fourth, finally, by nothing or by nothings! * * * *

Do not imagine that such opposite treatments correspond to diversities in the indications deduced from such or such circumstances in the disease; not at all; it is not so that the typhoidians understand medicine. The science of therapeutical indications, which constitutes in fact all practical medicine; that science to which all the great physicians of every age who have treated of epidemics, from Hippocrates to Sydenham and Stahl, have assigned such an elevated rank, that science does not exist for the typhoidian physician. *Il s'en change tout cela*; and, as the last step in their progress, they have descended to pure and simple empiricism, such as existed in the infancy of the art. Ask of one of these doctors the reason of his preference, for his exclusive preference for blood-letting, purgatives or

any other treatment, and he will reply to you by statistics. * * And God knows what may be the value of statistics applied to therapeutic unities. Always when reasoning or practical demonstration fails, each one has his statistics all ready to prove the excellence of his method.

It is thus that *rationalism*, in substituting itself for tradition, instead of relying upon itself for the progressive development of the medical art, has only produced anarchy and chaos.

Now, if one could compute the thousands of human lives which are compromised every day and hour, in this chaos of practical medicine, he would acknowledge with terror that typhoidism is the most deadly scourge of our era :

Quidquid delirant medeci plectunter achiivi.

According to the statistical deductions of M. Carnot, derived from the registers of the State, and which are now in the hands of a committee of the institute, the mortality of youth has doubled since 1800. The proportion of deaths in the military hospitals have also *doubled*. Well, in this period of 53 years, are included the three successive reigns of the materialist systems which we oppose, to wit : The anatomical system of organicism, the physiological school of Broussaism, and typhoidism.

Et nunc intelligite ! * * *

The public, comprehending little of what is going on, but suffering cruelly from the insuccess of medicine as it is practiced, turns in its despair to homœopathists, venders of secret medicines, and charlatans of all sorts, who promise it, at least, what medicine *a la mode*, is incapable of either giving or promising.

The reign of typhoidism has become the golden age of quackery.

The typhoidians also begin to be alarmed at the mortality of the prevalent diseases, a mortality which is truly desolating when the immense progress made in public and private hygiene is taken into consideration. They seek, in their way, the cause of this disastrous mortality ; and, unable to discover it from their point of view, they attribute it—is it incredible ?—to vaccination ! Yes, vaccination, that idol of the nineteenth century, is now-a-days subjected to the bitterest assaults. In the first place, it is reproached with being old and worn out, and not to be depended upon but for a limited number of years. If this is the whole evil, it might be remedied by more or less re-vaccinations, and by renewing vaccine matter by means of cow-pox, as has been already done. But there is another re-

proach which is far graver still, if it is well founded. It is pretended (without other proof than incontestable statistics) that vaccinia, by preventing the eruption of variola in childhood, does not destroy the unknown germ of that disorder, and that this germ is subsequently developed in adult life, producing either variola itself, or else some other grave disease. This argument, or rather this prejudice, is precisely that which has prevailed among the populace and the old women since the announcement of vaccination. Do physicians, who have heretofore laughed at it, intend now to entertain it seriously? It is a fact that some typhoidian physicians openly accuse vaccination of typhoid fever, and that they even consider vaccination the principal cause of what they call *the constitution of the century*. It would undoubtedly be a great consolation to the typhoidians if they could succeed in making vaccina the scape-goat, and could render it responsible for the mortality of prevalent diseases. But this is still purely hypothetical. And yet they already talk of abandoning vaccination in order to revive inoculation. A professor of the faculty has declared himself a partizan of this reform, and teaches the practice of inoculation to his pupils, as he himself learned it from the inoculating physicians of the last century.

I have no intention of interfering at this time in this crusade against vaccination. Until light is thrown on this question, if indeed it is ever to be hoped for, I cannot forego a certain distrust. I fear some new retrograde progress, some step backward, like typhoidism; I do not believe that the existing school can realize any useful and serious progress, until it abjures its false principles, and resumes the doctrines of the Hippocratic or traditional school.

This is all I have to say in regard to the propagation of typhoidism and upon its practical results.

As to the system, considered as a scientific conception, it originated (as all the false systems which have succeeded each other since the close of the last century) in the exigencies of material philosophy, that yoke which official medical teachers have not yet shaken off. This is what I attempted to demonstrate twelve years ago, in replying to an honorable and learned colleague, who asked my opinion in regard to the yet recent invasion of typhoidism. I will reproduce that letter and my answer, as published in the *Revue Medicale*, for July, 1852. They will be found to contain a serious and profound discussion of the basis of the new system, examined in the only work *ex professo* which it has yet produced.

M. Gilbert's Letter to M. Cayol.

"The judicious and striking remarks which you have recently made upon the epidemic at Avignon and Strasbourg, have encouraged me to address you a few words upon the prevailing epidemic in Paris, which is generally designated by the name of typhoid fever.

"I was present lately at a meeting of hospital physicians and city practitioners, when various questions connected with the reigning epidemic formed the chief topic of conversation. I learned that at one hospital containing 230 beds, there were upwards of 60 cases of typhoid fever at one time; another gentleman informed us, that he also had a great number under treatment, and had not lost a single case out of several hundred; I heard from the lips of a third, the important information that provided no active treatment was employed, and the *expectant* method chiefly trusted to, typhoid fever would *always* terminate happily; a fourth added, that he thought mild laxatives, in many cases, useful. All agreed in designating the disease as *typhoid fever*.

But, although this name may have been brought into fashion by a school which is willingly satisfied with words in place of things, who is there that will not admit that the appellation is ill-chosen at best, and that in particular it cannot be applied to the epidemic now prevailing in this metropolis? For in what does this epidemic really consist? In fevers induced by the continued heat of an unusually warm summer, which has caused the development of diseases analogous to those which prevail in tropical climates. Now these fevers (usually of a benignant form) assume very rarely the proper typhoid character; but are usually of a bilious or catarrhal form: in some cases, the fever is inflammatory and continued; occasionally it is more or less remittent; and still more rarely has it any thing of an adynamic or putrid character, be it observed, to which the name of typhoid would be least inapplicable. All these forms of febrile disease, are evidently attributable to the mode of reaction in individual cases—a reaction which manifests itself in different ways, according as the constitution of the patient is either sanguineous, bilious or nervous.

I have several patients in my service of skin-diseases at the Hospital St. Louis, affected more or less severely with the epidemic. In some it has been only an ephemeral fever, which passed off by sweat-

ing in two or three days; while in others, the fever assumed the catarrhal form; cough, nausea, slight diarrhoea, and a white coating of the tongue, being the most prominent symptoms. In one of the patients the ataxic variety of the disease was characterized by restlessness, delirium, paralysis of the bladder, and constipation of the bowels. In a few cases the symptoms have been remittent. Now I ask, is it not prudent to retain the old classic names of these various forms of fevers, rather than to blend them all together under the single appellation of *typhoid*?—which, as far as the present epidemic is concerned, is unquestionably the least applicable of all. Is there not a great practical advantage in retaining names which in themselves suggest therapeutical indications? and has it not been clearly shown that the pretended success of certain statistic physicians, who have boasted of the results of a particular method of treatment, are explained by the erroneous use of this phrase, *typhoid fever*?

If you will allow me to add one word upon the treatment of the reigning epidemic, I will say in conclusion, that while concurring with the majority of my colleagues that in most cases the expectant treatment is safest and most judicious, still I have employed quina with decided benefit in cases presenting a remittent character (usually without shivering at the commencement of the paroxysm,) and in ataxic cases; and when there was excessive vascular action, I have had recourse to moderate depletion with advantage.

I should be happy if this brief letter might induce you to develop, in one of those articles so weighty in thought and so serious in language, which you have the gift of writing, the refutation of the doctrines of the pretended eclectics among us.

Receive, etc.

GILBERT."

Letter from M. Cayol to M. Gilbert.

"You ask me to talk with you on the subject of typhoid fever. Alas! you well know what I think of it: you wish me to put my hand into an open wound, to lay bare the miseries, and to expose the infirmities of the school that has been called the materialist, the anatomical, the anatomo-pathological, the physiological, the organic, the eclectic, or by what other epithet you may choose to name it; for it is always the same.

In zoological science in general, as in medicine in particular, in ultimate analysis there cannot be more than two schools:

One views the organs of the body, whether in a healthy or diseased state, as the instruments of life ; diseases, as abnormal reactions or functions of the organism ; and organic alterations, as effects and eventual results of these abnormal functions and reactions ; this is the vitalist or spiritualist school in medicine.

The other seeks and pretends to discover, in the organs or their contexture, in the molecules of which they consist, and in their material alterations, the *why* and the *wherefore* of life, and of all the physiological and pathological phenomena by which it is manifested: this is the anatomical or materialist school, with the synonymes of which you are familiar.

This school, the superannuated daughter of the philosophy of the last century, has no longer any point of support in general philosophy, which has shaken itself free from the materialist fetters, to soar to a more elevated intellectual sphere ; but it now rests upon a spirit of coterie and mutual admiration which has succeeded marvellously well of late years. Adroit in profiting by political circumstances on every occasion, it has got itself installed in all the professional chairs, and into almost every scientific position ; and thus it has acquired a sort of monopoly of the public teaching of medicine, most zealously excluding every one who does not hold the same opinions, from having any share along with it. Every work that is purely intellectual, is displeasing to it, and will often excite a movement of repulsion on its part ; for it knows nothing and appreciates nothing but figures and material phenomena.

If, in a *concours*, it is wished to defeat a man of real talent, whose mind has roved beyond the narrow circle of anatomism, some mediocrity is always found who will blindly obey the dogmas of the sect, and it will adopt such a man, however ridiculous he may be :

Dignus, dignus est intrare in nostro docto corpore !

The coterie does not love the *Revue Medicale* ; it reads and profits by it as much as it can, but it never mentions it. That is its tactics. It has long since placed us upon the *index*.

As long as the anatomical school had a head, poised on the broad shoulders of Broussais, it managed to maintain the attitude of a doctrinal system. By pushing to the extremest limits the localization of diseases, and referring to an inflammation of the gastrointestinal mucous membrane all the phenomena of essential or primary fevers, the celebrated reformer solved in his way, and by de-

terminated principles, the great question of fevers, which is the culminating point of every medical doctrine.

When Broussais died, his school died with him ; no head, no doctrine :—or rather the doctrine died first, for every one knows that Broussais survived by several years the death of his intellectual offspring. There was, moreover, a scism in the camp of the materialists. The present coterie, which already bestirred itself not a little, occupied the same position, in the school of medicine which the *doctrinaires* do in that of politics ; they are so called because they have no doctrine, and yet they regard themselves as the sole adepts in government craft. This coterie refused to acknowledge Broussais as its legitimate head ; it threw off the appellation of *physiological*. an assumed that of *anatomo-pathological, organic, and eclectic*. Still the system of *gastro-enteritis* being obsolete, the immense problem of fevers was without a solution, and rested with all its weight upon the feeble school which had wished to substitute its dogmas for Broussais.

The embarrassment was great. M. Andral, who at that time was engaged in publishing a second edition of his Clinique Medicale, no longer knowing what to do with fevers, left them out altogether. “ *The progress of science*, he said in his preface, has induced me not to devote, as in the former edition, a special volume on fevers.” Singular *progress* that ! A few such steps, and medical science would be reduced to zero. “ Yet (continued M. Andral) I have carefully preserved all the observations contained in that volume ; but I have now given them another place, arranging some of them among the *diseases of the abdomen*, and others among the *diseases of the nervous centres*.”

We clearly perceive by these timid and embarrassed remarks, that the young professor had retained a slice of the system of gastro-enteritis, since a portion only of the volume upon fevers was transposed to the section of diseases of the abdomen. We see also that he attempted to stitch upon this slice of doctrine, a fragment of another of quite a different nature :

Unus et alter assuitur pannus.

The position was quite untenable, as I have demonstrated some time since.

Physicians were unwilling to employ the expression gastro-enteritis to designate fever in general, because it recalled the dominion of

Broussais, and they did not wish to appear before that school. It was the policy of the coterie to erect altars against altars, to constitute a separate school, or even many schools ; for, after all, each one wished to have his own. The sarcastic severity with which Broussais was accustomed to rebuke these ridiculous intentions is well known.

The terms dothineritis, follicular enteritis, intestinal exanthem, etc., were not pliant enough to embrace every variety of fever. A new phrase, therefore, was necessary, and it was resolved to call the disease *typhoid fever* ; and subsequently, in order to get rid of the objectionable word "fever," it was denominated *typhoid affection* or *disease*.

Rare et sublime effort de l'imagination !!

The word typhus, in Greek, signifies stupor ; and hence, Hippocrates and many writers after him, applied the name of *typhus* or *typhus fever* to certain grave or continued fevers in which fever was the predominant and characteristic symptom. But the epithet *typhoid fever* or *affection* applied to fevers in general, only characterizes utter confusion of ideas and absence of sound medical doctrine.

What is a fever or disease that resembles typhus, but yet is not typhus ? When we speak of *varioid*, we signify an exanthem which approaches more or less nearly in its symptoms to genuine variola. We see pustules here and there, and compare their form, color and mode of development, and judge whether there is identity or only resemblance to small-pox. But it is impossible to conceive of any thing which resembles stupor, and which is not stupor. In this simple phenomenon, whatever its degree of intensity, there is no longer any thing to compare.

Explain yourselves, gentlemen of the anatomical school. Is there always stupor in these diverse and opposite fevers which you so arbitrarily group together ? If there is no stupor, why call the disease typhoid ? How can it have any resemblance to the fever, the very name of which points to this as its characteristic phenomenon ? If stupor does exist, why not call it typhus or typhus fever ?

It is because materialist prejudices are present with their demands, and because this sect, unable to characterize fever by any single anatomical fact, has not the courage to characterize it openly by the expression of any vital phenomenon, as stupor ; it is afraid of

appearing vitalist; and hence, as it would be rather ridiculous to give the name of *typhus* to a multitude of trifling febrile diseases which no more resemble the genuine typhus fever than the bite of a flea does an attack of apoplexy, they have happily bethought themselves of the word *typhoid*—a word which, expressing only a vague analogy, it was supposed might be applied to all the fevers which they despaired of being able to characterize by local lesions.

Nevertheless a man appeared of wonderful mental tenacity, and of indefatigable patience, who did not despair of discovering the anatomical character of typhoid disease, that is, as he understood it, of continued fever in general.

Fortified with his anatomical knowledge, with his eyes, his hands and his scalpel, he undertook the hardest and most fastidious task that any physician perhaps ever accomplished in behalf of the *interests of science*.

During six consecutive years, he subjected himself to the task of accomplishing and submitting to what he called a mercurial analysis, all the cases of acute disease, of whatever nature, which were received in M. Chomel's wards at La Charité; and this with the preconceived design of comparing *acute typhoid affections* with *acute non-typhoid affections*, as regarded their symptoms as well as their organic lesions.

We observe already that to establish his field of observation, M. Louis takes for granted what is disputed, and that instead of taking his starting point from something known and established, he traces an imaginary line. Can any thing be more fanciful and arbitrary than this *a priori* division of diseases? This is a vain hope of solving a difficult problem by an insignificant and valueless word; it appears to me impossible to conceive of a more complete confusion of medical ideas.

Let us pass on, however. Here are hundreds of acute diseases of every variety, accompanied by 133 autopsies, minutely described and exactly recorded. In the first place, it is necessary to separate all these diseases into two categories, and to compose two unities in order to have the elements of a binary comparison.

How does M. Louis do this? He abstracts the pneumonias, pleurisies, apoplexies, and in a word, whatever he calls an acute inflammatory affection. He adds to these eruptive diseases, and of all together he constitutes his category of *acute non-typhoid affections*.

All that remain after this process, that is not inflammatory or eruptive disease, belongs to *typhoid fever*.

Thus are constituted two categories, two nosographical unities, the comparison of which, symptom by symptom, lesion by lesion, organ by organ, by means of *numerical analysis*, must lead to the discovery of the anatomical characters of typhoid fever, or in other words, of the *seat and nature* of that disease.

Did any one ever see two unities made thus ? Does it not appear like an attempt to parody an excellent law of nature, *unity in multiplicity*, which law has nothing to do with the matter.

If these two unities, composed of such a large number of diverse and complex pathological individualities, were really distinct and separate ; if there existed as clear a line of demarcation, or nearly so, as M. Louis has instituted with his pen between the two columns of his register, he might hope for some result from the comparisons he proposes ; but the least reflection suffices to show that this is not the case—that the reverse is true.

Who can believe that, in the category of *acute typhoid diseases*, M. Louis has not, perhaps quite unconsciously, admitted on the one hand some inflammatory diseases, and on the other hand some diseases that are not really typhoid ? If any one could believe this, his mind would be disabused by reading the author's own observations ; for we find in the details of his autopsies, that in nineteen cases of *typhoid fever*, there was found more or less decided carnification or hepatization of the lung ; that in several other cases, tubercles or other pulmonary lesions existed, and in short, that out of 45 deaths from alleged fever, these organs were sound in 15 only ; in 19 there was pleuratic effusion, in many others considerable congestion of the pia mater, in some albuminous false membranes on the cerebral surface, and in some others partial softening of the substance of the brain.

After this, M. Louis enters upon endless wearisome anatomical subtleties, to prove that such an one of these various lesions was not precisely like those found in subjects who die of *acute non-typhoid affections*, or that such another was of very slight importance. * * * We know what value to attach to facts like these ; we have also made autopsies, a great many of them, during a long series of years. M. Louis does well to say so. The remark remains and will remain.

And in the other category of diseases, those which are arbitrarily designated *non-typhoid*, is it possible to imagine that, among all the

cases of peripneumonia, angina, scarlatina, apoplexy, and especially among the cases of protracted disease, there were not many which had as much of a typhoid character as the contents of the other category?

And among the patients in the two categories who recovered, can we not legitimately suppose that there was a greater confusion still than in regard to those who perished?

Let all these remarks be carefully weighed—let us suppose, if it is possible, by some approximate data which may be easily deduced from what has gone before, the innumerable sources of error which emerge on every side on such a bad field of observation—and then decide whether we have here the proper elements of legitimate deductions.

M. Louis, unembarrassed by difficulties of which he does not appear to dream even, imperturbably prosecutes his work.

In the first part he presents eighteen excellent observations of typhoid fever to serve after a fashion as a type of the disease. Each of these observations is terminated by a most detailed account of the autopsy, followed by some reflections and commentaries upon the symptoms and also upon the organic alterations. He finds in all an alteration of the agminated follicles, called Peyer's glands, or *plaques elliptiques* of the small intestine, which are more or less red, tumefied, hard or soft, ulcerated or non-ulcerated, according to the intensity of the lesion. Corresponding alterations of the mesenteric glands are also found; these are more or less enlarged, reddish or blueish, softened or indurated, and sometimes in a state of suppuration, especially towards the extremity of the ileum, near the cœcum, etc.

The second part, entitled *General Description of the Organs*, comprises a successive comparative description of all the viscera in subjects who have died of typhoid fever, or have died of other acute diseases. Be it observed, the author proceeds always by a method of *numerical analysis*, which consists in making arithmetical estimates of all the changes of color, consistence, texture, volume, etc., which are found in each viscus; and, in comparing these estimates, in order to determine the relative frequency in the two categories of each of these alterations. The author thus passes in review in so many separate articles, occupying three hundred pages, not only all the large and small organs of the body, but also their appurtenances and dependencies; he forgets nothing, not

even the excrement contained in the large intestine, the quantity, color and consistence of which he carefully records, in order to be able to assert precisely how often it was liquid, soft or solid, green or yellow, etc., in the *acute typhoid diseases*, and subsequently comparatively in the *non-typhoid affections*. By this detail, the rest may be conceived : *ab uno disce omnes*.

The conclusion of all these arithmetical calculations and comparisons is, as one might have foreseen, that alterations of the elliptical patches of the small intestines are found in all subjects who have died from typhoid fever, and that they are not found in subjects who have died of other acute diseases. True, we find in the latter ulcerations in the intestines, and even tumefaction and redness of the mesenteric glands ; but these ulcerations do not precisely affect the *plaques elliptiques* ; and you will easily comprehend the great difference ! Be careful not to confound in practice diseases so dissimilar : the mistake might be most serious !

Thus, then, M. Louis has gathered the fruit of his long and laborious task. The problem is solved ; the discovery he wished to make, he has made. That it may not be supposed that we are wronging M. Louis, we shall let him announce the precious results of his observations and calculations in his own words :

“ The elliptical patches of the small intestines having been found to exhibit a morbid alteration only in those persons who have died of the typhoid disease, this alteration having been constant, usually very serious, always developed according to the same law, whether death has arrived after eight days sickness or after a much longer interval, and having been also in some cases the only lesion present, it is necessary not only to regard it as *peculiar to the typhoid affections*, but as *constituting its anatomical character*, just as tubercles do that of phthisis, whatever may have been the cause which produced their development.”*

Here, in fact, M. Louis' work concludes, as far as we are concerned ; it has already seemed very long, and yet we have not reached the end of the first volume ; all that follows adds nothing to the certainty of the demonstration.

In the third part, entitled *Description of Symptoms*, the indefatigable author proceeds to discuss comparatively the symptoms of acute typhoid and non-typhoid diseases, by the same method of nu-

* Op. cit. tome premier, p. 199.

merical analysis, and with the same minuteness as he has already displayed in regard to the lesions of the various organs found on dissection. Four hundred mortal pages scarcely suffice him to register an infinite number of minute, tedious, isolated, pathological and semiological details, which are subsequently arranged in arithmetical tables, which can never impress the mind or be fixed in the memory, from the utter absence of all logical cohesion between them. By such a method as this, the observation of the living man is more dry, barren and fanciful than that of necroscopic phenomena in the dead, as the former will not yield so readily to isolation and arrangement of appearances as the latter. Instead of a series of living and animated pictures, the study of diseases becomes nothing but a dead letter.

I shall not follow the author into the domain of semiology ; it would be useless as far as my object is concerned. I cannot leave this portion of the work, however, without a single reflection. That a person should draw up cases minutely, and analyze them in different ways, is quite natural. Every one has the method of working ; and provided he arrives at some useful results, no one will call him to account for the means by which he has attained them. But to print a medley of notes and calculations, and to compose heavy volumes of them—is not this letting the public into the confidence of one's studies for a price ?—a dear price too, when it is remembered that the public consists chiefly of young students who have to economize both time and money. If M. Louis, for example, had been content to publish the *results* of his researches upon typhoid fever, supporting them by a few chosen cases, and explaining his process of numerical analysis, so that every one could verify them at his leisure, his work would certainly have been quite as instructive, and much more readable. When the house is built, they usually take down the scaffolding, unless they wish to leave it to conceal some defect in the construction.

PART THIRD.

AMERICAN INTELLIGENCE.

ART. I.—*New York Hospital Reports.*

H. D. BULKLEY, M. D.

MY DEAR SIR,—I regret that I am prevented from furnishing you with a more elaborate report from the Hospital during my recent term of duty ; but I trust that the subjoined cases will be found worthy of record. They have been prepared from the records of the house, by a friend for whose accuracy I can vouch.

Very truly yours,

WM. H. VANBUREN.

Strangulated (congenital) Hernia: tumor situated in inguinal canal; stricture at internal ring; operation; cure.—John Anderson, 30, robust, mate of a coasting vessel, was admitted on Friday, September 23rd. He was complaining in the belly, and inability to relieve his bowels, which had not been opened since the Sunday previous (six days.) He had a tender swelling, the size of an English walnut, in the right inguinal canal, and a swelling in the same side of the scrotum, as large as a goose-egg. The external abdominal ring was free, being occupied only by the elements of the spermatic cord ; the little finger introduced into it could touch the inguinal tumor, and perceive a slight impulse communicated to it in coughing. The scrotal swelling, which had grown gradually since the intestinal obstruction, seemed to consist entirely of fluid. Between the inguinal and scrotal tumors, the spermatic cord was free from thickening. The patient's pulse was 70, and good ; he hiccupped occasionally, and had vomited slightly. but only after taking food or drink. His abdomen was distended, resonant, and hard.

He stated that two weeks ago he had ruptured himself at Savannah, in lifting a cask, and that the rupture, which he could always readily return when protruded, had never passed the stage of bubonocoele. On the Sunday before admission, whilst at sea, the rupture became painful, and he could no longer reduce it ; at the same time the bowels began to swell, and cease to act. His vessel arrived at this port

on Tuesday, and he was under medical care until his entrance into hospital ; but without entire relief. Attempts had been made to reduce the tumor, and tobacco, enemata, laxatives, antimony and morphia had been employed. The taxis was now attempted again, but without favorable result. The patient was ordered a fraction of a drop of croton oil every hour, in a pill, with ext. of hyoscyamus, and comp. extr. colocynth, to be followed after the fourth hour by a full enema, administered thoroughly by means of the long rectum tube.

At a consultation called at six o'clock, P. M., no results having followed the treatment, the operation was advised.

The incision was commenced over the internal abdominal ring carried along the course of the inguinal canal and spermatic cord, curving downwards upon the scrotum. On opening the sac, it was found to be continuous with the tunica vaginalis testis, the testicle being exposed, and some $\frac{1}{2}$ of fluid escaping—the scrotal tumor having thus evidently resulted from its accumulation. The tumor in the inguinal canal was formed by a knuckle of small intestine of a dark brown color, but fit to return ; the stricture, which was formed by the neck of the sac at the internal abdominal ring, was divided, and the gut returned with the usual precautions. The strangulated portion of intestine was coated with shreds of false membrane, and the internal surface of the sac was evidently inflamed. The wound was closed, moderate pressure applied by a spica bandage, and the patient ordered a grain of opium every hour, except when asleep. He had very copious evacuations from the bowels during the night.

His pulse never exceeded 100 after the operation. The opium was continued for four days, and gradually withdrawn, no unpleasant symptoms whatever occurring, and convalescence followed rapidly.

Remarks.—The long continuance of the strangulation in this case (6 days,) and the inflammation of the sac which had taken place, rendered the prognosis bad. In view of the probable occurrence of general peritonitis, opium was given freely, as in an ordinary case of wound of abdominal cavity.

The continuity of the cavity of the peritoneum with that of the tunica vaginalis still persisting at the age of 30, brings this case under the denomination of congenital hernia, and shows at the same time, the inaccuracy of this term. The patient could not recollect that he had ever been affected with rupture previously, at any time of his life.

Temporary and Complete Amaurosis, symptomatic of gastric and intestinal irritation.—Henry Woods, æt. 23, colored, seaman, was admitted into the Hospital on the 14th of September. He stated that on the day previous, after eating some fruit, he was seized with colicky pains in the abdomen, which were soon after succeeded by utter blindness. The eyes appeared to be perfectly healthy, and were free from pain, the pupils sluggish in their action, and somewhat dilated. On examination by the attending surgeon, he was found to be laboring under simple colic, dependent upon improper food. The tongue was white and pasty; the abdominal pain paroxysmal and characteristic. He had vomited freely. Bowels had not acted for several days. The blindness was regarded as probably symptomatic of the intestinal irritation. Cups were ordered to temples and back of neck, and an active mercurial cathartic administered. On the following days the bowels had been relieved; no longer colicky pains, and there were symptoms of returning vision. No pain or tenderness of abdomen.

On the third day the eyesight had returned, and he was discharged completely cured, one week after admission.

No symptoms could be detected in this case of the presence of any poisonous substance in the stomach.

Crushed Foot; Amputation (Chopart's); Recovery.—P. Malone, æt. 20, was admitted on the 15th of Sept., having, a few hours before, had the toes and metatarsal bones of the left foot completely crushed by a railroad car, one of the wheels of which passed over the part. Upon entering the Hospital, the patient was immediately put under the influence of ether, and it became evident, from the examination which was then instituted, that all prospect of saving the foot was out of the question. Chopart's operation was accordingly performed, some little difficulty being experienced in making satisfactory flaps, on account of the mangled condition of the soft parts. The wound was brought together by sutures, although very great doubts were entertained regarding the probability of obtaining union by the first intention. An anodyne was administered, and the stump directed to be kept constantly wet with a mixture of *tepid yeast and water*. Small sloughs formed at two points upon the upper flap, which, upon separating, left the parts beneath in a healthy condition. The patient has continued to do well, under such simple treatment as the exigencies of the case required; and at the present time, the 22d Oct., has very nearly recovered, with the prospect of an excellent stump.

In this case, as in all injuries produced by the passage of the wheel of a railroad car over a limb, the integuments of the neighboring parts had been subjected to excessive stretching, and the superficial blood vessels ruptured; thus placing the flaps in a condition unfavorable for healthy union, and rendering them extremely liable to slough from the slightest provocation, such as the occurrence of erysipelas, or even of a moderate degree of healthy inflammation. The precaution was adopted in this case, of bringing the flaps together with as little tension as possible; and at one point, over the inner side of the ankle, where the integuments had been detached from the parts beneath, a free incision was made, so as to expose the whole extent of the subcutaneous laceration, and to this practice the escape from sloughing, at this point, was attributed.

Wound of Abdomen, with Intestinal Protrusion; Treatment by Opium; Recovery.—T. Sheridan, æt. 30, laborer, was admitted on the 10th of Sept., with a stab in the abdomen, about one and a half inches from the umbilicus, and a little to the right of the median line. The wound was about two and a half inches in length, semi-circular, the concavity looking upwards and to the left, and from it a large mass of both great and small intestines protruded. No opening could be detected in the intestines, and no other fluid than blood (of which a large quantity) had escaped.

The intestines were returned, the wound closed with sutures, a compress and bandage applied, and anodynes administered.

The treatment consisted in the administration of free doses of opium (a grain every hour, for the first twenty-four hours, and then a grain every two hours) until the fourth day, when the sutures were removed, and there being no symptoms of peritonitis, the patient's bowels were opened by the administration of castor oil.

Under this treatment the patient convalesced rapidly (no untoward symptoms whatever occurring), and he was discharged cured, on the 24th inst., *just a fortnight after admission.*

Compound Comminuted Fracture of the Femur, near the Great Trochanter, with extensive laceration of the soft parts; Amputation at the Hip Joint; Death.—Eliza Reid, æt. 8, was admitted into the Hospital on the 5th of July, two hours after being run over by a railroad car, which produced a compound comminuted fracture of the femur, and extensive laceration of the anterior portion of the thigh; the wound extending from two inches below Poupart's ligament to the knee joint. No pulsation could be felt in the anterior tibial artery. There was considerable vomiting before admission.

Reaction having taken place, a consultation was called, and amputation at the hip-joint advised; Drs. Cheesman, Buck, and Marhoe being present. At 10 o'clock, the patient being placed under the influence of ether, the operation was performed, by antero-posterior flaps, and the wound brought together as rapidly as the safety of the patient would admit. Very little blood was lost during the operation. The patient vomited during the administration of the ether, rejecting some half digested food, which had been taken before the accident. The shock of the operation was excessive, but in two hours the patient had completely rallied, under the careful use of stimulants, and, all circumstances being considered, passed a favorable night.

The condition of the patient appeared promising until the morning of the 7th, when the pulse began to grow more feeble and frequent, and slight delirium was noticed. From this time she sank gradually, and died at 2 o'clock, P. M., forty-six hours after the injury, and forty-two after the operation.

The fatal issue in this case was attributable mainly to the excessive depression of the powers of life, which always follows railroad injuries. The child rallied from the fearful injury she had received, and also rallied well after the operation; but sank in the effort at reparation. A *post-mortem* examination showed union already partially effected in the stump, and no internal injuries were detected. The mode of operating adopted in this case, was that which had already been performed by the attending surgeon, in a case followed by recovery; the posterior flap being made by an incision carried from without inwards.

Compound Comminuted Fracture of Humerus, near Shoulder Joint, with Wound of Brachial Artery; Amputation at Shoulder Joint; Recovery.—Christopher Fricke, æt. 35, a healthy German, of temperate habits, was admitted on the 1st of July, with a comminuted fracture of the humerus, at its surgical neck, accompanied by severe bruising of the surrounding parts, and occasioned, a few hours previous to his admission, by the fall of a building, at which he was employed at work. One of the fragments of the humerus had been forced through the integuments on the inside of the arm, near the axilla, lacerating the soft parts extensively, and wounding the brachial artery. The limb was much infiltrated with blood; its temperature was much lower than that of the opposite side, and no arterial pulsation could be detected below the seat of the injury. No hemor-

rhage. On the following day, reaction having taken place, a consultation was called upon the case. It was determined to endeavor to secure the wounded artery, to explore the extent of the injury, and, if possible, to endeavor to save the limb. A ligature was accordingly placed beneath the axillary artery, after the administration of ether; and the incision thus made was prolonged downwards, over the brachial artery, into the original wound. Several arterial points were secured, but the comminuted state of the bone, and the extensive detachment of the soft parts around its head, together with the extensive infiltration of blood amongst the injured parts, rendered the removal of the limb evidently advisable, and this was accordingly effected by means of antero-posterior flaps. Serious collapse followed, from which the patient rallied in a few hours under stimulants, and subsequently recovered, without a serious symptom. He was able to leave his bed within three weeks from the operation, and was discharged, cured, on the 11th of August.

ART. II.—*Annals of Micrology*—By ROBERT D. LYONS, M. D.

DEFINITE MORPHIC ELEMENTS.

Elements of Blood: Origin and Destination of the Blood-corpuscles.—Bennett has investigated this highly interesting and important problem, about the solution of which two opinions have chiefly prevailed; one being, that the colored corpuscles are formed from the colorless (by direct transformation, Paget;) the other theory maintaining, that while such may be the case in fishes, reptiles and birds, in mammals the colored disc is merely the liberated nucleus of the colored corpuscles (Wharton Jones.) From his own researches, Bennett inclines to the latter view; the paper contains the results of several observations connected with his researches on leucocythemia, which appear to him sufficient to establish this opinion. The following are his conclusions:

1. That the blood-corpuscles of vertebrate animals are originally formed in the lymphatic glandular system, and that the great majority of them, on joining the circulation, become colored in a manner that is not yet explained. Hence, the blood may be considered as a secretion from the lymphatic glands, although in the higher animals that secretion only becomes fully formed after it has color by exposure to oxygen in the lungs.

2. That in mammalia, the lymphatic glandular system is composed of the spleen, thymus, thyroid, supra-renal, pituitary, pineal, and lymphatic glands.

3. That in fishes, reptiles and birds, the colored blood corpuscles are nucleated cells, originating in these glands; but that in mammalia they are free nuclei, sometimes derived as such from the glands, at others developed in colorless cells.

4. That in certain hypertrophies of the lymphatic glands, their cell-elements are multiplied to an unusual extent, and under such circumstances find their way into the blood, and constitute an increase in the number of its colorless cells. This is leucothymia.

5. That the solution of the blood-corpuscles, conjoined with the effete matter derived from the secondary digestion of the tissues, which is not converted into albumen, constitutes blood-fibrin.

Whatever importance may be attached to these conclusions as regards the adult, it must be borne in mind that blood-corpuscles are formed under conditions in which there can be no connection shown with glands of any kind, as in the ovum; and again, as we learn from M. Lecanu's researches, that while fibrin is abundant in the serum, it exists only in the *envelopes* of the globules.

Micro-Chemistry of Blood.—M. Lecanu has presented to the Institute a memoir on the blood, in which he takes up the solution of some highly important questions—viz: the origin of the fibrine, the separation of the globules from the other constituents, and the determination of the chemical constitution of the globules. Having satisfied himself that a concentrated solution of sulphate of soda, which prevents the precipitation of fibrine, is without action on the globules, he received a quantity of blood into a solution of sulphate of soda, at a temperature of 12 degs., and marking 12 degs. Baume. The mixture was then filtered; the globules remained on the filter, while the serum passed through; from the latter, on the addition of eight or nine times its volume of water, the fibrine was precipitated in gelatinous filaments, scarcely a trace of it remaining in the filtered liquor. As it is subsequently shown that the globules contain but very little fibrine, and that only in their envelopes, it follows that this substance is contained in the serum chiefly. In order to obtain the globules perfectly free from serum, it is only necessary to allow them to remain on the filter, and wash them with the saturated solution of soda. When obtained thus, M. Lecanu finds that they consist of not less than eight different substances—1. Hæmatosine, 2.

Globuline ; 3. A very small quantity of albumen ; 4. A fibrinous matter, constituting their envelope ; 5. An animal extractive matter soluble in ether and alcohol ; 6. A fatty matter ; 7. Various salts, amongst which are chlorides, phosphates, and alkaline carbonates ; and, 8. Water, which holds all these matters, with the exception of the envelope, in solution. Water, it is well known, breaks up the globules, leaving the envelopes isolated, and dissolving their contents ; by boiling the solution, the globuline, hæmatosine, and albumen, are coagulated. Hæmatosine is soluble in alcohol and ether at ordinary temperature, giving to solution a beautiful red color of blood, and by spontaneous evaporation, forming small lamellæ of a metallic lustre, and an amethyst color, exactly like the red silver of mineralogists. M. Lecanu believes in the presence of iron in the blood, but does not express himself definitely as to its particular mode of combination. (He suggests, with regard to hæmatosine, that there is reason to think that it would be an excellent substitute for the combinations of iron exhibited in chlorosis and other affections. The difficulty of preparing it in sufficient quantity is, however, considerable ; the largest quantity he obtained being about 30 grains, from somewhat more than one pound and a half of ox blood.) With regard to albumen in the globules, the commissioners appear to think that, as it is in such very small quantity in these little bodies, swimming in a highly albuminous fluid, its presence in them may be due to absorption or endosmose. The following contrast between the two chief constituents of the blood is highly interesting and valuable : “ It results,” say the commissioners, “ from these observations, that the animal matters which compose the serum are essentially different from those which compose the blood corpuscles. The serum contains but albumen and fibrine ; no globuline—no hæmatosine ; the globules, on the contrary, contain hæmatosine and globuline, with a fibrinous matter, but no fibrine, and only a little albumen.”

Neucleolated Red Corpuscles in Blood.—Mr. George Busk has recently met with an example of this very rare condition. In his *Memoir on the Blood*, in the “ *Philosophical Transactions* ” (1845,) Mr. Wharton Jones states that the bodies are common in the blood of the horse and elephant ; but they appear to have occurred to his observation but once, and that doubtfully in the blood of man. Mr. Busk’s observation was confirmed by Mr. Huxley ; only one corpuscle was seen, but in a very distinct and clearly defined manner

The nuclear portion of the corpuscle was rather smaller than most of the free blood discs, but not so small as some of them, nor, apparently, much, if at all, below the mean size. On proceedings being taken to make an accurate measurement of it, it disappeared; no others could be found on prolonged investigation of the same blood, which was taken, about an hour after breakfast, from a young and vigorous man.

Blood-Corpuscles Nucleus.—Harting advocates the existence of a nucleus in the human blood-corpuscle. When treated with a solution of corrosive sublimate, the corpuscles become remarkably altered in form; they contract to about one-tenth of their size, assume a spherical shape, and at the border a small, generally round or oblong body passes out. This he considers to be the nucleus. This distinguished observer further remarks that in the blood of the same animal much difference will be found in the comportment of the corpuscles to a solution of given strength, some being more and some less affected, apparently according to the manner in which they are presented to the reagent.

Absolute quantity of blood-corpuscles.—*Quantitative Microscopical and Chemical analysis of the blood-corpuscles and blood-fluids.*—Under this head, a memoir has appeared from the pen of Vierodt, who proposes to estimate the quantity of the blood-corpuscles in a given volume of blood by actual numeration of them under certain conditions. The mode of procedure is as follows: a small quantity of blood is taken up by a capillary tube of a certain diameter, and uniform in size throughout. The length of the blood column is measured under a low magnifying power, and this quantity multiplied by the known diameter of the tube gives the total value of the column. The blood is now allowed to run from the tube on a glass slide, and the last particles are washed from the tube with a solution of gum or albumen, with which the whole is now mixed, and uniformly spread on a glass slide in a narrow striæ, three to four inches long. With a finely pointed glass tube the corpuscles are distributed with as much uniformity as possible. The blood-streaks are then successively brought under the divisions of an ocular micrometer, and the number of corpuscles in each carefully counted. The smaller the diameter of the capillary tube, and the volume of blood employed, the less difficult will be the process of reckoning. Where we only wish for approximative results, a measured volume of blood may be mixed with a known quantity of a menstruum, such as gum

or albumen solution, and a microscopic quantity of the mixture can be submitted to the microscope for the purpose of counting the corpuscles. In a subsequent communication the author gives the results of nine measurements made with extreme care and delicacy of manipulation. The capillary tubes employed were 0.8295^{mm} to 0.8327^{mm} in diameter, the quantity of blood operated on not more than one five-hundredth of a cubic millimetre. The mean of the nine calculations gave, in a cubic millimetre, 5,174,400 blood corpuscles; in a cubic line 59,396,100 corpuscles; the maximum in the cubic millimetre, 5,818,700, the minimum 4,597,800. These measurements were made during the winter, and when the author was suffering from indisposition. The process of counting is extremely laborious, Vierordt's idea of quickness being, that in summer and by good light a single enumeration may be completed in a week!

The method of estimating the total quantity of blood-corpuscles in the body, by multiplying the number contained in a given volume, and ascertained by this process, into the total volume of blood in the body, is open to several objections, and contains more than one source of fallacy. Thus the corpuscles vary much in diameter. (Lehmann has found great differences in the blood of the porta and the liver.) The several acts of micrometry and enumeration are of exceeding difficulty and liable to many errors. But in addition to all these difficulties, which have been pointed out by Funke, in his report on the subject in the *Jahrbucher* (*loc. cit.*) we apprehend that the labor and truly iron patience required to carry out a single enumeration will be an almost total obstacle to its employment. We indulge hopes, however, that some simplification of the process may be devised, whereby its practical application to the blood analysis may be, in a great measure, facilitated. In estimating the relative as well as the actual quantity of the red corpuscles in various states of disease, such a method would be invaluable in clinical research. In a critical review of a work on leucocythemia, without being acquainted with the researches of Vierordt, we have ourselves called attention to this great desideratum. Professor Bennett thinks the best method of estimating the relative proportion of the two kinds of corpuscles, is to observe the spaces or meshes left between the rolls or aggregations of yellow corpuscles. In reference to this subject we ventured to make the following suggestions: "For the purpose of a more accurate estimate, we would suggest the use of an ocular micrometer divided into squares

of any convenient dimensions, with the aid of which we may ascertain, in a number of examples of normal blood, what is the natural numerical proportion between the red and white corpuscles, by counting both as they are placed under the square in two or three opposite portions of the field, selected indifferently; the average result of a few computations of this kind, we are of opinion, would be found to be not far from the truth. A similar proceeding could then be had recourse to, to estimate the proportion between the numbers of the white and red corpuscles in suspected cases of leucocythemia. Until some such process be brought into use generally, it is manifest that we can learn but little from such vague statements as are usually appended to reports of cases, "one-third as numerous," "greatly increased," etc. etc. We do not venture to be too sanguine about the success of this process, but we have some hopes that it will be found useful.

PART FOURTH.

EDITORIAL AND MISCELLANY.

SALUTATORY.

In assuming the Editorial management of this Journal, which is now approaching the last period of a septennial existence, we are not without misgivings that its future will be as able and as useful as its past. Possessed of talents, untiring industry, and an instinctive desire to promote the interests of the profession, my immediate predecessor has spared no pains to make the Journal an acceptable visitor to the great body of physicians, located in the West and South. Assurances from many who are competent to judge of the value of periodical literature, and a constantly increasing subscription list, attest that his exertions have been appreciated. He now retires, as editor, much to his own regret, but in obedience to impressions that warn him, that his previous life has been characterized with too much assiduity and toil. Surveying for a moment the new position in which we find ourselves placed, we are not without apprehensions, that our course, however conscientious, will always be of an unexceptionable character.

Among the ends for which Journals are established, a leading one

is universally recognized to consist in making a record of the observations, experiments, and reasonings of those who are at present in the field of inquiry. To select from these sources, that and that alone, which will repay *perusal* and prove available to the practitioner, is a task requiring for its accomplishment, not only a considerable amount of labor, but intellectual qualities of a very high order; and were it not that we expect, in the commencement, to draw largely upon the indulgence and liberality of our readers, and those engaged in similar pursuits, we should feel inclined to shrink from the task.

Constituted with an ardent veneration for "principles"—or the combined judgments of those who have investigated under circumstances the most favorable to the development of truth, it will be a source of pleasure to us, at all times, to hold these up as the landmarks by which all, exercising the duties of physicians should be guided; and also a recognized duty to bear our testimony explicitly against departures from them, wherever observed, or by whomsoever made. Adherence to principles we regard as *orthodoxy*, and as lying at the foundation of every thing useful; departures from them as *heresy*, with results as dangerous as the torch of the incendiary.

These remarks are intended to apply to those claiming a connection with the regular profession. With quacks and the various phases and forms of quackery, we expect to have but little to do. Observation, continued through a series of years, and considerations founded upon the philosophy of the origin of quacks, have convinced us that their extermination is most successfully accomplished by turning them over to their own ignorance, absurdity, and misdeeds. Argument or ridicule directed against them has but little effect. The former they do not understand; the latter is construed into persecution.

Prominently standing out before the Teachers and Journalists of the age, is the subject of medical education,—a subject agitated of late almost to the point of vexation, and regarded by many as being at present thread-bare. As long, however, as children are born destitute of medical information, and different plans and facilities are proposed for their instruction, the subject will continue to be one of interest.

Regarded altogether, our country, so fruitful in every thing useful, may be considered as being *enciente*—pregnant with young doctors. It appears, according to former and present usages, to be the

vocation of our Practitioners to superintend their stage of "*gestation*," while our Medical Colleges seem to be performing the function of *accoucheurs*; and, whether right or wrong, the latter are not only compelled by the customs of the age, to assume the parentage of the offspring, but also to vouch for their character in the future—Now, it may be among our desires to pay some attention to the wants of the community with respect to this offspring, the number that are annually being born, their usual period of *gestation* and what kinds among them ought to be *asphyxiated* in the process of parturition.

According to tendencies, which in the old world seem to be unalterable, the time, we may imagine, is not far distant when, in our own country, the present system of private pupilage will be abandoned, and young men designed for the medical profession, will be found spending four-fifths of the year in attendance upon the prelections of professors. The efforts lately made to prolong the lecture term, may be recognized as one of the first movements designed to bring about such a result. And, as our profession progresses in a knowledge of its own usefulness and destination, other measures looking in the same direction, will be projected and kept before the public mind, until we are prepared for the transition. While this reformation is going on, it will be our aim to throw no obstacles in the way, but on the contrary contribute what we can to facilitate a change so desirable.

To bring about the best possible state of feeling among Physicians, and promote the profession in the confidence and respect of the community, there has been, from time without date, a kind of formal statement of the judgment of the good, and those having the most enlarged views, in regard to the method by which physicians should demean themselves towards each other, and also to those entrusted to their care. What we allude to is called a Code of Ethics. At the hands of the American Medical Association, this Code has lately received a revision and may now be regarded as containing a summary of precepts, as perfect as any that can be prepared. Our efforts, we hope, will be so directed as to give character to this instrument, and hold out all the inducements at our command for its observance, as the only means of perpetuating our usefulness and respectability as a learned profession.

Enough, perhaps, has now been said to indicate our course, or as politicians say, "define our position;" and, for the present, we

take our leave of the department relating to *promises*, and proceed to the more interesting one of *performance*.

THE LEGITIMATE GOAL OF PROFESSIONAL AMBITION is the title of an *Introductory* to the present course of lectures on *Materia Medica* at the University of St. Louis, by Wm. M. McPheeters.

The style of the address is good, above mediocrity, and the matter is of a character that ought to command the attention of all who aspire to honor or even usefulness. The propositions introduced for presenting the different aspects of the subject, are of a character in the general unexceptionable, and they are very agreeably and forcibly discussed. One of these reads as follows:

"Forsaking all other pursuits, the physician must make his profession the grand object of his life." Commenting on this the author remarks: "Medicine, gentlemen, is a jealous calling; it brooks no divided affection, and half-way devotion, and bestows its honors only on those who continue to be its constant votaries."

Such doctrines are very appropriate at the present time. In a few months we will have some thousands of young men liberated for the time from the Medical Colleges of the country, each one of whom will find himself spontaneously deliberating on the means necessary to success. Let those who have aspirations ponder well in their minds the remark of Dr. McP.

Devotion, however, is not all that is essential to success. Industry, untiring application, in season and out of season, under all circumstances, it will be found, has characterised those who have become celebrated. Examine the habits of Sanctorius Boerhaave, Haller, Sydenham, Bichat, Sir Charles Bell, Ashley Cooper, Orfila Graves, Rush, Physic, Eberle, Drake, and data will be obtained by which to ascertain the influence of industry properly directed, in giving character to men.

Many young men imagine themselves highly gifted by nature, and perhaps also possessed of that undescribed and indescribable phantom called *genius*, and upon such things they rely for success. Such are always disappointed. They may attain to the position of "clever fellows," but never to that of *men of science*.

NOTICE.

Those who are in arrears to the Journal will notice the change relating to Editor and Proprietor, and in future will direct letters on business, as well as communications, to the present editor.

BALLAST.—Those who are in want of this article on the subject of typhoid fever, will gain something by reading the article on "*Typhoidism*" published in this No. of the Journal.

DR. CARTWRIGHT'S PAPER ON YELLOW FEVER is published in our present number, notwithstanding its great length. Those who wish to see *false* facts, in regard to one of the most important diseases of the Western Hemisphere, handled without gloves will read it. We copy it from the New Orleans Medical and Surgical Journal.

MEDICAL FEES.—THE CREDIT SYSTEM.—At a meeting of the Medical Society of the county of Burlington, N. J., Oct. 11th, 1853, the following preamble and resolutions were offered and laid upon the table for final action at the next meeting:

"Whereas, There being many abuses connected with the popular credit system, as it prevails at the present time, whereby physicians are often defrauded of their just dues, the members of this Society are

"Resolved, That after the first of January, 1854, they will adopt the plan of presenting their bills for professional services, at the termination of each case of sickness.

Resolved, That the rates of charges as adopted by the New Jersey Medical Society, by which we are governed, are in our judgment just and honorable; and in acknowledging our fealty to it, we consider ourselves bound to execute its requirements."—*N. J. Medical Reporter*.

TRANSACTIONS OF THE AMERICAN MEDICAL ASSOCIATION.—The 6th Volume of this valuable national work has just been issued from the press, and is being forwarded to subscribers. It forms a volume of 870 pages, and is highly creditable to the Association and to the Publishing Committee. The book contains numerous colored litho-

graphic and wood cut illustrations, and is much more expensive and valuable than the volume of any previous year. Every American physician, who feels an interest in encouraging our national medical literature, or who would avail himself of a work, for its value, the cheapest medical publication of the day, should not fail to add a copy to his library. Though the subscription list is this year considerably increased, the Publishing Committee are still largely in debt. Dr. Francis Minot, of Boston, Dr. C. Hooker, of New Haven, Dr. A. March, of Albany, and Dr. H. W. De Saussure, of Charleston, have rendered the Committee effective aid in increasing the circulation of this year's transactions in their respective States. The actual cost of the volume to the Committee, is \$2.90 per copy. It is furnished to single subscribers for \$5; to Associations, taking twenty-five or more copies, for \$3. Through either of the gentlemen above-named, a copy can be obtained by remitting the minimum price of \$3. We trust that many of our readers will gladly improve the opportunity to procure the work at a price so reasonable.

PRINCIPLES ADVOCATED BY THE PHILADELPHIA MEDICAL AND SURGICAL JOURNAL.—1. Cash payments at the time of rendering service in the practice of medicine.

2. Elevation of the standard of Medical Education.

4. Legal protection in the study and practice of medicine.

4. Thorough and complete organization of the members of the profession throughout the country—for the dissemination of medical and hygienic facts and the general welfare of citizens.

5. The establishment of a National Association for the Relief of the Widows and Orphans of Deceased Indigent Graduates in Medicine.

6. The establishment of a "Medical Publication Society," for the publication of medical works by the members of the profession.

7. The establishment of Veterinary Colleges in the United States.

ECTROTIC TREATMENT OF SMALL POX.—The Physicians in Montreal, and other portions of Canada, are using extensively the tincture of iodine (one dram to the ounce of alcohol) as a local application, particularly to the face, in the treatment of Small Pox. It is said to re-

lieve the smarting, and prevent the pitting or marking. It is applied every day with a brush, during the first five or six days of the maturing eruption. Another form in which it is used, is the powdered iodine in olive oil—1 dr. to 1 oz. of oil. Dr. Samuel Jackson, has we believe the credit of having introduced this practice some years ago.

LETTER OF PROFESSOR JUDKINS.—The attention of the reader is called to the letter of Prof. Judkins. It contains information of a valuable character, in regard to the men and things of Paris, the Athens, at the present time, of medical learning. Some of the practice detailed will not fail to strike the reader as being, in boldness, something beyond what we are in the habit of regarding as a proper respect for "life and limb." To somebody, however, belongs the office of experimenting; and at present as well as in former times, the French have been as conspicuous in matters of this kind as in those touching their political existence.

Among other things, Prof. J. speaks of having witnessed free incisions made into the knee-joint on each side, for the cure of chronic inflammation and ulceration of the parts; and also of an operation by Demares, on a patient who had a bit of percussion cap lodged in the posterior chamber of the eye. The operation consisted in making an incision through the sclerotic and choroid coats just behind the cornea, and through this, exploring the parts with a pair of forceps. Such operations must strike the Surgeons of our country in no very favorable light. With us, surgical science is cultivated for the relief of suffering and the prolongation of human life. We have not yet learned to appreciate the reputation that results from the performance of operations that it is known beforehand will prove unsuccessful.

The resignation of M. Louis, at Hotel Dieu, is a matter of no small moment to the cause of medical science. Few men of either ancient or modern times have labored more and theorized less in the department of pathology. With a mind uncommonly well balanced, he has exhibited great closeness and severity in his researches, and an uncommon caution against fallacies. He will retire from the field of his labors, with the impression on the part of the medical profession, that his contributions, in number and value, have, in all probability, never been excelled by any individual. His "*Numercial Method*,"

which consists in observing every case and every symptom of a case numerically, that we may, by the collection and analysis of facts deduced therefrom, be enabled to arrive at general conclusions and general laws, must continue for a long time to throw around his character an uncommon degree of interest.

ON ADHESIVE STRAPS IN FRACTURE OF CLAVICLE.

“*Dear Sir* :—In looking over No. 9, of “Philadelphia Medical and Surgical Journal,” Case 2, “Private Practice,” called to mind a case I had last summer. Henry S., a fine, noble looking little fellow, six years old, riding with his father in a light York wagon, was thrown out, and fractured the right clavicle. Having frequently seen the difficulty, nay, impossibility, of using the usual “apparatus” with children, I thought of trying adhesive straps. After bringing the ends of the bone in oppositon, I applied a sufficient number of strips of adhesive plaster, about an inch broad and twelve long, firmly from the breast to the back, over the clavicle, and then secured a compress, with one or two strips over the seat of the fracture—the elbow, forearm and hand well supported in a silk handkerchief. I have treated a good many fractures of the clavicle in my time, but never one with more satisfaction to myself, or more ease and comfort to my patient. In three weeks he was using his arm, and the seat of the fracture can now with difficulty be detected.”

W. GARDINER, M. D.

THE OLD DOMINION.—If we are not very much mistaken, we can see such a developement of home talent, determined to make its mark in this old State, that the time is not far distant when but very few medical students will go further North to obtain a medical education. The young physicians of Virginia are making a noble effort to place medicine in their State where politics have always been—in the front ranks. We like her manners—we congratulate her on the number of young and talented men at present in the field, and would be pleased to see her do with the crown of medicine as Napoleon did with the iron crown of Charlemagne—put it on her own head.—*Phil. Med. and Surg. Jour.*

[UNTIMELY END OF A PHYSICIAN.—The following melancholy occurrence, if there were no others of a like character on record, admonishes physicians that they are but men ; and that indulgence to excess in poisonous drinks works out fearful results :—Ed.]

“ Dr. J. A. C., of this county, a gentleman universally liked and much esteemed by his neighbors and friends, a successful farmer, and an excellent physician, was found dead in his bed on Wednesday morning, about 3 o'clock, his throat horribly cut. Notwithstanding his many excellent qualities, he had one besetting sin which proved his ruin—he indulged too freely in intoxicating liquors. He made repeated efforts to reform, and some months since joined a division of the Sons of Temperance ; but a short time after he was tempted, his unconquerable appetite overcame his good resolution, and he fell. The consequence was, that he was attacked with mania, and during his temporary insanity, his attendants having fallen asleep, he procured a knife and put an end to his own existence. Those in his neighborhood, particularly the poor, will deeply feel his loss, and none that knew him but must regret this deplorable end of a high-minded, generous, and noble man, himself his only enemy.”—*Boston Medical and Surg. Jour.*

FAULTS OF MEDICAL WRITERS.—In the discourse by Dr. Samuel Jackson before the Philadelphia County Medical Society at its last annual meeting, we find the following remarks on a subject which deserves the attention of the profession generally—especially those who are in the habit, as all should be, of writing occasionally for the press.

“ Let the young doctor do his very utmost in acquiring a habit of writing with *perspicuity, propriety and precision*. Let him seek no other ornament, for medical language is, like Thompson's loveliness, when “unadorned, adorned the most.” No merit will make amends for the want of perspicuity. I can show whole paragraphs in our American books which have no meaning whatever, being similar in this respect to those verbose letters that Queen Elizabeth used to write when she had pre-determined to say nothing. Medical diction ought to use as few words as possible, thus going the shorest way to the end of a thought. An English writer on morbid poisons, wishing to describe the daily progress of the variolous pustule, uses the

following verbosity: "You receive from a long distance, from Dublin or from Edinburgh, a lancet, on the point of which there is a little dry animal matter. This lancet has pricked the pustule of a patient suffering with smallpox, and the contents of the pustule have been suffered to dry on the lancet. Now with this lancet you make a single puncture in the arm of a healthy person, not previously defended by vaccination or otherwise, and what results?"

Now suppose this author, Dr. Simon, had wished to describe also, the effect of a rattlesnake's bite, he might have begun thus: You receive from a long distance, from Utah or California, a rattlesnake, which Linnæus calls *crotalus*, it may be the species *horridus* or *durisus*; this dreadful animal has a sacculus of poison at the root of each fang, and when he bites, these sacculi pour forth their deadly contents along a groove in each fang. Now you permit this animal to bite a horse, for an experiment, or perhaps it bites one of you and what results? In this multiplication of useless verbiage, a great amount of time is wasted without any compensation.

In a celebrated medical journal, we have this circuitous way of saying that a certain medicine was probably useful in rheumatism; the disease was cured in eleven days; "and lemon juice, if it was not the principal remedy, certainly exerted an important influence toward the production of that end." What think you, gentlemen, of *producing* or *leading forward* an end or a cure? One might suppose that the writer was a cobbler, and that he was talking about the *producing* or the *pulling forward* of his waxed-end. And then he has lemon-juice *making an exertion, and exerting an influence*.

Why should a writer say, "I had recourse to a medicine," if he had not previously used it in the same disease? This word means a running backward. The simple English word to *give*, is often supplanted by the Latin word to *exhibit*; that is, to make a show of the medicine. A shopkeeper *exhibits* his goods, a physician *gives* or *orders* his medicine. Celsus took nearly all his ideas from the Greeks, but he did not copy their words. I believe he never uses the word *exhibere*, but *dare et uti*. Sometimes he says *adhibere*, but this does not mean *to make a show*; moreover, it is pure Latin. His own language was sufficient for him, except in the mere naming of diseases; and hence one reason that his style and manner are universally approved.

It is of no little importance that our young author should not practice the coining of words. A new idea may require a new word,

but old ideas will always be most intelligibly introduced by known terms ; hence the great English lexicographer, whose head might well be fancied as swarming with words, introduced only four in all his writings. His rule was, "to admit only such as may supply real deficiencies, such as are readily adopted by the genius of our tongue, and incorporate easily with our native idiom." If a little license be granted how will you define its limits ? How will you definitely measure the old vulgar phrase *too much* ? A little liberty will prove like moderate drinking, and lead to intemperance. If every writer of the present times should coin words at his pleasure, and the next generation should adopt them and add to them, what odious gibberish would then fill the air ! It is told of Sir John Mandeville that, when far in northern Asia, with his retinue, their words were all frozen before they could be heard, and that, on coming south, they were suddenly thawed, and filled the air with their liberated voices. I can hardly credit this fact, as the amiable author does not relate it himself, and yet something similar may happen to the jargon of the present generation ; while confined to books it may pass without much notice, but our successors may find the accumulated vocabulary to become a clattering of unmeaning voices, the mere echoes of our vanity, and as unintelligible as Sir John's thawed vocables.

In the Transactions of the American Medical Association you may find some animating specimens of these important additions to our deficient language. *Numerism, socialism, sensationalism, subjectivity, progressionist, therapeutication, truths eliminated, annexes of the heart.* A writer in vol. iv., p. 58, calls impressions "*intuitively-felt relations,*" and then inquires, "Are not all the felt relations based on the immediacy and intuition, and not on representational and transmitted impressions." Truly, if men in high places continue to pour forth such floods of impurity, men in low places may well complain ; hence I have ventured to notice the subject ; it pertains to *self-education*, which is our present topic."

COD-LIVER OIL.—It is said that the nauseous taste of this medicine may be removed by chewing and swallowing a small quantity of the roe of a smoked herring, both *before* and *after* taking the oil. A piece of sardine will answer the same purpose.

DUTY OF MEDICAL MEN.—Dr. Todd, in his farewell address, on resigning his professorship, made the following remarks:—

“It appears to me, that when a man proposes to devote himself to the practice of an honorable profession, he has a two-fold duty to perform; first, to fit himself to the utmost of his ability for the practical duties of that profession, and, secondly, having done so, it is incumbent on him to divest himself, as far as possible, of every engagement which may interfere with his bending his thoughts and attention to the various, anxious, difficult, and often perplexing questions which are continually arising in the course of his professional practice. Every member of a liberal profession should keep it constantly in view that he exercises his calling not only for his own personal benefit, but for the public good, and for the good of his profession at large. So every practising physician or surgeon, whether the sphere of his labor be within wide or narrow limits, should bear in mind that in the successful application of his art, by fair, honorable and truthful means, is involved the repute and estimation in which his profession is held by the public at large. Let each of us act under the feeling, that to himself specially is committed the keeping of the honorable character and the scientific credit of our common profession, and he will have the strongest motives, not only to eschew everything that savors of charlatanical pretence, but to seek for and insure the highest means of moral and intellectual culture.”—*Med. Gaz.*

ADULTERATED CREAM OF TARTAR.—A very large portion of the cream of tartar used for domestic purposes, and, what is even worse, much of that used for medicine, is badly adulterated. A writer in the Boston Journal says that an examination lately made of six specimens showed in the purest, sixty-two per cent. of foreign matter.—The consequences are unwholesome bread and inoperative medicine. An extensive dealer in the article states that three barrels of alum and three of flour were lately sent to a mill in Boston, with instructions to be manufactured into cream of tartar, and to be labelled with the name of the manufacturer. The man refused to place his label upon a spurious article, and the raw material sent to some more compliant person. Ground cream of tartar is sold in many of the shops, lower than the crystalized can be afforded, and is of course adulterated. Grocers should be very careful in their purchases, and house-

keepers should be quite as careful. The writer in the Boston Journal says of the specimens analyzed:

“The added ingredients consisted of white sand, ground pumice, ground rice, and flour. This is a vile compound to offer to a sick child or an adult invalid. If the purchaser will provide himself with a small phial of the solution of iodine, and place a drop in connexion with the suspected article, the presence of flour or any article containing starch, is instantly shown by the blue tint which follows. Let him place a few grains in boiling water, and if it is not entirely soluble, let him reject it. An experienced dealer can always judge with a great degree of accuracy by the appearance of the article:—Pure cream of tartar is intensely white, and has a degree of moisture and cohesion about it entirely unlike flour, or any of the articles used to adulterate it.”

It is a wonderful evidence of ingenuity—to say nothing of the rascality of it—the great extent to which adulteration of the most common articles is carried. Articles so cheap that it would not seem an object to cheat in their preparation are mixed up with something a little cheaper, and often very deleterious to health. Stringent laws should be passed for the inspection of all substances intended for food or medicine; the spurious articles should in all cases be destroyed without mercy, and severe penalties should be visited upon those who manufacture them or knowingly sell them.—*Providence Jour.*

CHOLERA INFANTUM.—The efficacy of sub-nitrate of bismuth in this affection is incontestible. During the past summer we have had occasion to employ this remedy in a considerable number of cases, and have had every reason to be satisfied with its effects. The bismuth is best administered to children in suspension; the following formula is convenient: Sub-nitrate of bismuth, ʒij; gum-arabic in powder, ʒj; orange-flower water, and simple syrup, each ʒj; water, ʒj. A tea-spoonful every hour. We have found the anti-vomitive powers of this mineral to be very remarkable.—[*Virginia Med. and Sur. Jour.*

GLEET.—M. Bourgeois has found the following formula of substance in this obstinate affection: Balsam of tolu, ʒiij; liquor of sub-acetate

of lead, ʒiij ; linseed oil, ʒiv. Reduce the balsam to a fine powder ; add three drachms each of the lead water and oil ; then make an emulsion of the whole by adding gradually the remainder of the oil.

This injection is intended for blennorrhea ; the amount of balsam and of sub-acetate of lead being diminished, the remedy may be advantageously employed in gonorrhoea.—[*Rev. Med.*

OTALGIA.—Dr. Delioux announces (*Bulletin de Therapeutique*) a simple remedy, which he has found efficacious in relieving a large number of cases of neuralgia of the ear, and also in curing those cases of erythism in which the chief symptom consists in distressing humming and ringing in the ears. This is local etherization. A few drachms of ether are placed in a bottle, the mouth of which is adapted to the external meatus. The bottle is grasped in the palm of the hand, and the animal warmth suffices to volatize the ether.—Dr. Delioux states that the effects of this treatment are rapid and permanent.—[*Ibid.*

The town council of Fredericksburg, Virginia, have recently passed an order, directing that the tax on licenses, paid by lawyers, physicians and dentists, for the year 1852, should be refunded. This is in accordance with a decision recently made by Judge Lomax, that such taxes are unconstitutional.—*Fredericksburg Herald.*

The New Orleans Bulletin states that the yellow fever first made its appearance in New Orleans in 1794, and continued until 1797. The population of the city was then less than ten thousand, and the average annual mortality nearly seven per cent. In 1822 the highest number of deaths, in any one day from yellow fever, was sixty. In 1833 the highest estimate in one day is put at fifty-three. In 1841 the highest number 43. In 1847, on the 2d day of September, 77 ; and this year, on the 5th inst., 208 died of this disease—that being the most fatal day.

In the course of an inquest, in London, lately, Mr. Wakley, the coroner, observed that it would be well to acquaint the public with the fact that if persons in a house on fire had the presence of mind to apply a damp cloth or handkerchief to their mouth and nostrils, they could effect a passage through the densest smoke ; but the surest mode would be to envelope the head and face completely in the damp cloth.

STARLING HALL, (late Howard Infirmary.)—In consequence of the declining health of Professor Howard, the Trustees have placed this institution under the medical care of Dr. F. Carter, Professor of Obstetrics and Diseases of Women. Dr. S. M. Smith, Professor of Theory and Practice, and Dr. R. J. Patterson.

Starling Hall is well fitted and furnished. It embraces departments for the treatment of medical and surgical cases, an Eye Infirmary, &c. A fine suit of private apartments are neatly furnished, supplied with baths, &c., and set apart expressly for the treatment of diseases of females.

This institution is peculiarly adapted to the treatment of those chronic diseases, which for want of proper appliances and means for carrying out indications, were resisting, and likely to resist such treatment as the general Practitioner is able to adopt and enforce ; and as such we recommend it to the profession and the public. See advertisement.

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PART FIRST.

ORIGINAL COMMUNICATIONS.

ART. I.—*Letter from Paris.* By J. T. JUDKINS, M. D.

MY DEAR DOCTOR :—When you were in Paris, did you ever make a visit to the Bourse, or Exchange, during its business hours? If you did not, you have lost one of the finest pictures of apparent disorder and confusion, that can well be imagined. To a stranger, who is ignorant of the language, the scene presented, is one in the highest degree, novel. The wildest confusion seems to prevail, hundreds of men are engaged, at the same time, in violent gesticulations, accompanied by loud cries, in which every variety of tone and compass of the human voice, can be distinguished.

Eh bien—Strange as it may appear, to the dignified and orderly members of the profession at home, a scene of confusion somewhat analogous, but less in degree, may sometimes be witnessed at the meetings of the great Academy of Medicine of Paris, which numbers among its members, some of the most distinguished men of the age—I witnessed one of these—the moment after the President had called the members to order, the scene of disorder commenced, but did not reach its acme until some member objected strongly to the meetings of the previous meeting—then, there was noise, to which the President contributed his part, by frequently agitating a small hand-bell, followed by gestures and words of command for the ob-

servance of order. After several vehement pardonnoiz moi's on the part of some who demanded le parole, the confusion gradually subsided and quiet was restored.

However, during the regular business transactions of the Academy, such as the reading of reports, their discussion, etc., order prevails.

On the 8th of November last, in company with a large crowd of Physicians, I attended a meeting of the Academy, in order to hear the report of M. Malgaigne upon the new method of treating Aneurisms by injecting into the sac a solution of the Perchloride of Iron. This subject has, for several months past, engaged the attention of the whole profession in France, and I doubt not, but that a corresponding interest has been felt in other parts of the medical world. M. Malgaigne is considered the best critic and the most eloquent man of the faculty; he read a long report, in which he analysed the cases which had been treated by this method in Paris and other parts of France. He did not speak much of the therapeutic action of the medicine—or of the possibility of improving its virtues—or its mode of application. He enumerated 11 cases—only two of which had been cured, 4 had died, and the remainder had presented symptoms sufficiently grave as to warrant the rejection of the method.

Believing that this subject will interest your readers, I have translated the remarks of the different members of the Academy who have taken part in the discussion of this report. This I deem of more importance than the report itself; for everything of importance which it contains, can be gleaned from the speeches of the Surgeons.

In order to give an index to the sentiments entertained by a large number of Surgeons in Paris, I will, in the first place, translate a portion of the leading article of the Gazette Hebdomadaire, of the 12th of November. The Editor speaking of M. Malgaigne's report, said: "Something more was expected from the erudite Professor of Operative Surgery. Upon the evidence of only 11 cases—and without more ample information—to conclude upon the wholesale condemnation of this remedy, appears to us a summary mode of disposing of it. If the same rigorous enquiry had been made towards any one of the most brilliant operations in Surgery, which have proved so beneficial to humanity, we doubt much if the first 11 trials of any one of these, were attended with more complete success than has followed the use of this new method. It is the fate of all new

remedies to be badly applied at their first introduction into the science. The rules to regulate the Surgeon in their execution, can only be formed from the fruits of experience. Now, from this remedy, we have not, as yet, the benefit of experience.

“A few days since, a Surgeon, who has never been accused of either rashness or unskillfulness, drew attention to the imperfections in the instrument used, and also to some faults in the mode of operating with it. M. Malgaigne will also remember a skillful Surgeon of Lyons, who has shown that the Perchloride of Iron which has been used in all these operations, contains acid properties, which of itself is capable of comprising the success of the treatment. He proposes to substitute a neutral liquid, which he believes to be able to produce coagulation of the blood in the anurismal sac, without provoking inflammation of the arterial walls. Behold then, the way already opened for improvement. Without denying that the method has been followed with bad effects, still we do not think that its condemnation is at present justified.”

After the reading of M. Malgaigne's report, M. Moreau arose. He condemned in strong terms the practice of experimenting upon human beings. Such experiments as had been just reported, should only have been made upon animals, and they should never have been made upon man until they had been proved to contain nothing deleterious. He found, according to the report, that eleven cases had been treated by the Perchloride of Iron, four of these had died, and that grave symptoms had appeared in those which had terminated more favorably. He thought that M. Malgaigne had been too reserved. As for himself, he wished that the conclusion of the report had been more formal and positive.

M. Roux congratulated M. Malgaigne for the good thought which had prompted him to call attention to the subject under discussion. He thought that the Surgeons who made use of the method of M. Pravaz, had not weighed sufficiently the advantages of Hunter's method, which had given such beautiful results, and which he believed could not be improved upon. In the meantime, he thought it would be imprudent to pre-judge this new remedy. Although considering Hunter's method as an improvement upon all that had preceded it, still he did not believe that it should be considered as the limit of Surgery.

M. Velpeau, said that he would, in the first place, reply to expressions just made use of by M. Moreau. The word, “exper-

ments upon men," had always appeared to him a bad expression. The truth, however, is, that we do not experiment upon man, but when the means we possess are found insufficient, we endeavor to substitute better. I have been one of the first to try the method of Pravaz upon man, because I saw in what had been published, reasons to expect a good result. The experiments upon animals had seemed conclusive enough to warrant such an attempt. Facts were known that appeared to justify it.

The first attempt made by me was not successful, but it was not followed by serious consequences. Sometime after the injection, the pulsations returned in the tumor, when it was deemed advisable to have recourse to the tumor, after which inflammation attacked the sac, resulting in ulceration and rupture of its walls, and the evacuation of its contents. We were then able to ascertain that the injection of the Perchloride of Iron had produced the coagulation of the blood; a large clot was found, which was acting as a foreign body; it resembled much in appearance, the hair balls sometimes found in the stomachs of cattle, and presented properties that would have rendered its absorption utterly impossible. This I deem the chief objection to this mode of treatment. Perhaps it may succeed better in small aneurisms; but as yet experiments have not determined the fact. M. Velpeau concluded, by expressing his regret that a better result had not been obtained, for the ligature was not always innocent, and did not always prevent a return of the disease.

M. Laugier thought that the discussion upon this question, was a little premature, as but few persons were prepared to express an opinion upon the real merits of this method, and he would have preferred that the report of Malgaigne had been deferred until a later day. He should have liked also to have heard of its influence in erectile tumors, which he understood had proved as unsatisfactory as it had been upon aneurisms.

M. Gerdy spoke of the vicious tendency which had been introduced into Surgery during the past few years. At the present day Surgeons are not content to wait until the true value of new facts can be justly appreciated, but are eager to be among the first in employing them, so as to have the honor of attaching their names to the discovery. For my part, said M. Gerdy, I would not have tried this treatment upon men, still less upon my children. This is the Surgeon's criterion: that which you would refuse to attempt upon your own child, you should not attempt upon others.

M. Malgaigne agreed to the sentiments just expressed by M. Gerdy. Surgical morality ought not to be different from universal morality. But in the present circumstances, not only had there been numerous and repeated experiments upon animals, but also three cases of cure had resulted in men, before these fatal accidents had appeared.

He did not agree with M. Laugier as to the inopportune appearance of his report. He thought that it was high time to arrest Surgeons in bad course.

M. Valpeau desired to present some new considerations, but as the hour was too late, he would request that the discussion should be resumed at the next sitting.

At the meeting of the Academy, November 15th, M. Velpeau arose and said that as his object was not to oppose the conclusions of M. Malgaigne, he would proceed with his remarks, although that honorable gentleman was absent.

M. Valpeau said, " At the last meeting, I was not able to hear all of M. Malgaigne's report; and this is the reason why I have asked that the discussion should be continued, as one side of the question which appears to me very important, has scarcely been touched. M. Malgaigne, having communicated his report to the Academy, in order to have the question fully judged; it was, therefore, necessary to discuss it in a manner more detailed. I think, also, that M. Malgaigne has been a little hasty. We labor under a great illusion if we think that the question can be judged by us at present; a sufficient number of facts have not as yet been published. The scientific public will be more or less influenced by the decision which we may give; but it will not prevent other persons from experimenting, unless the thing appears too hazardous. Another embarrassment can also be easily prevented. It has been remarked that there were certain persons who felt strongly disposed to censure what others had done. Now there is a certain kind of censure that can exert a great influence. Thus, during the last meeting of this Academy, certain surgeons have been charged with being rash. This reproach affects me but little; but it may produce an injurious effect, in causing some skillful practitioners to recoil; and it is necessary that some one should experiment with new remedies. There are a great number of operations which are an honor to surgery at this day, which at their commencement were not always successful—the ligature of the External Iliac, and Primitive Carotid, for example; of which the two first attempts were entire failures.

"I have said that it was a bad idea to discountenance, in a general manner, experiments in surgery. In order to experiment, it is sufficient that the new method appears free from danger, that it presents advantages over all other known remedies, and that its effect upon animals is satisfactory. Surgeons decide upon cutting, when the patient's life is in danger, and when the operation affords the best means in their possession, for arresting the disease; but they never cut in a spirit of wantonness.

The employment of the Perchloride of Iron, in the treatment of aneurisms, is only the revival of a method quite ancient, and which has already undergone several phases. It has always been desired to cure aneurisms without the ligature, because the ligature leaves something to desire. Among others, the coagulation of the blood in the vessels has been thought of. To effect this, different processes were presented—one of which was the injection of coagulating substances into the blood, which idea has been advanced by M. Leroy (d'Etiolles,) and previous to him, by M. Monteggia. The attempts did not succeed, but still the idea has not been abandoned. I have made use of it myself, under another form. I had, in common with surgeons in general, observed that the lining membranes of blood-vessels had the power of determining adherent clots, from the contained blood. Thereupon arose the idea of acupuncture of aneurisms, which has been tried several times upon man, without success. Electricity was then used in concert with the acupuncture. Pravaz adopted this means a long time ago. The method styled, that of Petrequin, is no other than this, and it has produced a certain number of cures. It is a fact established, that the blood can be coagulated in such a manner as to cause the cure of certain aneurisms. Is it less dangerous than the ligature? This does not appear, to me, as yet demonstrated. Out of twenty cases where it has been tried, twelve have been unsuccessful, several of which resulted in death. It is a method still under experiment.

Persuaded that the blood could be coagulated so as to effect the cure of Aneurism, Pravaz persevered in its use upon animals, and declared, "that, by injecting a chemical substance, the blood could be coagulated very solid." This conclusion is not sufficient to warrant the experiment upon men. Many waters, of various kinds, have been invented, and praised for their virtues in arresting hemorrhages; but, generally, the trials of their power has been made upon animals.

Pravaz asserted that he had found a substance which certainly coagulated the blood. This was calculated to arouse the attention of surgeons. By his method, nothing could be more easy than to cure an aneurism. It only required the introduction of a hollow needle into the dilated artery and the injection of some drops of liquid, and you could not do otherwise than to give it the preference over the ligature.

Thus the gravity of the man who had invented this method, the experiments upon animals, and some successful essays upon man, authorized surgeons to make the experiment. Now, it was necessary to test this means when the opportunity was offered. But we cannot have aneurisms at pleasure. Even in the large hospitals of Paris, one or two years may pass without meeting with a proper case. I had a patient who was in an excellent state, and I employed the method of Pravaz. I have not regretted it. I was enabled to cure my patient afterwards by the ligature.

It is the wish that this question shall be judged to-day. For myself, I am disposed to believe that the method is good for nothing. I say *disposed to believe*; I do not wish to say that I am convinced of it. In examining certain facts which have been published, I must say that the case presented by M. Malgaigne appears to me strange. How? A patient having a false consecutive aneurism, has five drops of the Perchloride of Iron injected into it, and immediately afterwards, mortification of the whole fore-arm results! Four or five drops of Perchloride of Iron scattered through the blood of the arteries of the fore-arm, has caused a mortification similar to what a complete strangulation of the vessels would produce? There is something singular and improbable in this. It must have been some other affection that caused these grave symptoms.

Large quantities of the liquid have been injected into the vessels of animals; thus, M. Leblanc threw from 25 to 30 drops into the Temporal Artery of a horse, which artery is about the same size of the Radial or Ulnar in man; and no bad results followed the injection.

The Perchloride of Iron, is not an energetic caustic. You may wash your hands with it. I have often employed it in dressings, by saturating pieces of charpie with it, which I have placed at the bottom of wounds, and I have never seen it produce a mortification in the tissues.

With others, it is said to have caused inflammation ; but this may have been owing to the quantity of liquid used, which may have been much too large, and the incision of too great an extent. It has not been demonstrated that the Perchloride of Iron was the cause of the inflammation. I do not wish that the question shall be decided upon such facts as these. However, if this inflammation should be again observed, after the injection, it would be one reason for rejecting the method ; for violent inflammation in a large aneurism, would cause its rupture and secondary hemorrhages. M. Leblanc states that he has seen suppurative inflammation amidst the clots and vessels of animals.

Another difficulty comes from the clot itself. There are two forms of clot—the normal one is homœomorphous, and is capable of being absorbed by the natural ways, and thus in aneurism it disappears, and will not prevent the cure. There is also the clot which is produced by acupuncture and galvanism, this is likewise homœomorphous. But the clot determined by the Perchloride of Iron, is very different from the normal one ; it has a velvety, fibrillated appearance, or hair-like, is black and has no resemblance with the blood. This is an important point. It will be necessary to ascertain by experiments upon animals, if this clot can be absorbed. I say absorbed, because in large aneurisms the clot can only be removed in this manner. This is the difficult point to determine. Can this heteromorphous clot be absorbed ? or will it act as a foreign body, and thus produce inflammation ? or can it remain harmless for an indefinite period ? In the last, there would be but little inconvenience, but it would be wrong to trust it. If the clot cannot be assimilated, it is a reason for rejecting the method. The normal clot itself is not easily absorbed. The observations of M. Amussat and I. L. Petit, have demonstrated that the clot often remains as a foreign body ! The last named gentleman reported a very curious case of an individual who was cured of an aneurism at the bend of the arm, and in whom a hard tumor remained for several years ; when the hardness disappeared, the aneurism returned. Many other facts besides this one of Petit, have shown that the hard, healthy clot of blood is not always susceptible of being absorbed. Up to the present time, the Perchloride of Iron has not given results satisfactory enough, to warrant its adoption at the expense of the ligatures. But does this prove that we cannot succeed in curing aneurisms, by coagulating the blood by means of other liquids ? The ligature is al-

ways a grave process, and besides, there are cases where it cannot be applied, as aneurisms in the groin, at the root of the neck, and in the iliac fossæ. It would be in such cases as these, that great advantage would be derived from a coagulating liquid, whose efficacy had been proved, and which, in acting, would not cause inflammation in the vessels. This would be a great benefit to humanity.

Whether we make use of the old ligature, or the new mode (which is the method of Anel) in the treatment of aneurism, the patient is always exposed to serious consequences. I persist in calling it the method of Anel, and not of Hunter, malgré the pleasure I always feel to find myself in community of opinion with M. Roux; because the invention of this mode of ligature, in the treatment of aneurisms, really belongs to our compatriot Anel—perhaps it might be attributed to Ambrosia Parë, who said that the artery could be tied above the tumor.

Hunter had no other merit than that of having rendered popular the method of Anel; furthermore, his method is no longer followed—but that of Scarpa.

The operation of Anel, for aneurism, at the bend of the arm, is not attended with much danger. Still I should feel more happy if I was able to cure such an aneurism by the aid of a small canula and a few drops of liquid. I will conclude by saying that, judging from all the facts in our possession, the method of Pravaz is of no value in aneurisms. But the question is not yet decided, and it is still our duty to experiment upon animals.

I have omitted to speak of one thing, which was my attempts sometime since, to coagulate the blood by congelation. I had previously announced that congelation would enable us to perform surgical operations, without producing pain. To speak briefly, it induced a veritable anæsthesia in the part, and could be used with advantage in painful operations, cauterization, &c. Well, I employed it also, to coagulate the blood; but that attempt was not in the end successful. It is true that the aneurism became hard under its influence; but when the heat returned to the part, the indurated mass gradually softened and disappeared.

M. Moreau followed. He said that he did not pretend to give lessons in morality, and that he was not opposed to the trial of operations, even those that are hazardous, when they are required. But he could perceive no analogy between the ligation of the External Iliac and Primitive Carotid Arteries, and the new method which was

the subject matter of the present discussion. It is better, according to the precept of Hippocrates—better to adopt a hazardous process, than to do nothing at all. But here, he said, it is wrong to employ upon man a method which has had deplorable effects upon animals.

M. Velpeau has said that the question was not decided, although he has just performed this operation upon a man, which produced inflammation and determined a clot which could not be eliminated. He also has spoken of the case of M. Malgaigne, which was followed by formidable accidents and death. What more is required? Is it necessary to wait until other persons are destroyed? The use of Perchloride of Iron, in the treatment of aneurisms, is a method that ought to be banished from a healthy practice. As to congelation, that method is not new. It was the method of Guevier.

M. Velpeau responded that Guevier's object was not to cure aneurisms by coagulating the blood; but to cure them by the influence of cold, in diminishing the activity of the circulation in the whole course.

M. Leblanc read a report upon experiments performed by himself upon animals. He believed from their results, that the method of Pravaz, was warranted upon men. He said that coagulation produced by the perchloride of iron, was not followed, as had been asserted, by a thinning of the walls of the vessel, but, on the contrary, these walls would be thickened, whilst experiments well conducted, would not be followed by any serious consequences whatever.

M. Leblanc, informed the Academy, that he had in his possession a letter just received from M. Vallette, the Surgeon of Hotel Dieu, of Lyons, who writes, "That up to this time the method of Pravaz, has not given very satisfactory results, and it was not a difficult undertaking to such a skillful critique as Malgaigne, to discountenance a discovery, which I persist in believing, will have a successful future. A careful reading of the observations upon which M. Malgaigne has based his opinion, will leave upon every impartial mind, this conviction—that in the majority of the cases, it was not the method, but the bad application of that method, that we must attribute the want of success and deplorable results. After some further remarks, M. Valette reports in full the following:

Aneurism at the bend of the Arm.—Injection of the Perchloride of Iron.—Complete cure without accident. Analysis—

Louis Etienne Hugonnet, aged 30, a worker in silk, entered the wards of Hotel Dieu, in Lyons, July 14th, 1853. He has Hy-

peritrophy of the Heart, constitution quite feeble. A tumor, large as a walnut, is situated at the bend of the arm, the consequence of an awkward bleeding. The tumor presents strong throbbings, synchronous with the pulse, and which became more energetic whenever the radial artery was compressed. The compression of the ulnar artery appeared to have no influence upon the tumor, compression of the humeral arrested completely the pulsations of the tumor. By auscultation a very strong bruit de souffle was heard. The skin over the tumor was healthy, a small cicatrix indicated the point where the lancet had penetrated. The fore-arm inflexed upon the arm. The fingers are a little benumbed, but this numbness is gradually disappearing.

M. Valette decided upon testing the method of Pravaz. The operation was performed on the 11th of July last, in presence of Mons. Petrequin, Barrier, and Desgranges, Surgeons of Hotel Dieu de Lyons, —A. M. Bouchacourts, Surgeon in Chief of La Charité, besides a large number of physicians of the city. M. Valette decided on injecting 15 drops of the perchloride of iron, at 30 degrees prepared by M. Burin de Buisson himself,—but in truth only 13 drops were thrown as 2 drops were lost upon the canula and syringe. The injection was made with Charriere's Syringe—the cylinder being made of glass, enabled the operator to see that all the fluid was driven before the piston.

A tourniquet was first applied over the humeral artery, in order to secure an exact and permanent pressure. For still more security the artery above the tourniquet was pressed by the fingers of M. Chadrinski, Jutein to M. Valette. M. Petrequin exercised the compression of the arteries of the fore-arm. These dispositions having been made, a trocar was carried into the center of the tumor. The moment the style was withdrawn a fine jet of blood came through the canula,—the syringe was used without delay and the liquid injected. The patient who was very timid, and had been greatly alarmed at the curiosity manifested by the crowd around him, now complained of severe pain in the part.

After a minute had elapsed M. Valette carefully removed the canula. The compression below the tumor was maintained ten minutes longer, that upon the humeral artery for twenty minutes, whilst the tourniquet was retained for one hour after the operation.

During the day a little pain was felt extending along the fore-arm to the hand. The ends of the fingers are cold. The pulsations

in the radial artery cannot be felt; but are present in the ulnar artery.

July 22, M. Vallette has avoided carefully touching the tumor, until to day. It is now hard, the coagulation of the blood appears to be complete,—no throbbing of the tumor can be felt, except at its most internal parts. M. Vallette, and M. Ranier, thought this phenomena depended upon the bifurcation of the humeral. The radial should then be the seat of the aneurism, which had by its side the trunk of the ulnar. This belief has since been changed into an absolute certainty. The pains have diminished—the temperature of the hand increased, and the general condition of the patient presents nothing extraordinary.

July 24th, The patient can get up and walk, has been down stairs in the court, and the hospital.

July 27th, The tumor, which is hard, begins to diminish in volume, no pulsation in it can be detected.

July 31st, The tumor has diminished one half, it is not larger than an almond. The finger can be glided between the little tumor and the vessel whose pulsations are felt at the inner part. We feel certain that this is the ulnar artery. The movements of the arm can be executed well.

August 5th, The tumor is not larger than a large bean.

August 12th, At the earnest entreaty of the patient, M. Vallette consented to his discharge from the hospital. On the day of his leaving the ward, his actual condition was ascertained by Messrs. Petrequin, Barrier, and Desgranges. The tumor was the size of a cherry stone, was hard and rolled under the finger. No pulsation felt in the radial artery, still they seemed to have a tendency to reappear near the wrist; this however could only be felt by one or two of the Surgeons. It is evident that in all such cases the reëstablishment of the circulation is effected by collateral branches.

M. Vallette, saw this patient fifteen days after he left the hospital,—he, in company with other Surgeons, ascertained the soundness of the cure. The tumor then was not larger than a pea. The patient had recommenced his work, which required a constant movement of the right arm.

M. V. again saw this man during the month of October,—the cure is complete to all appearance.

After reporting this case, M. V. gives some directions for the employment of this method. He insists upon the use of the perchlo-

ride of iron at 30 degrees,—for if it is more concentrated than this, it becomes acid.

In the second place, the quantity injected should be carefully determined, according to the size of the tumor. In the case he had just reported, 13 drops was sufficient for about one centilitre of blood.

He said that the clot will increase gradually in size, after the injection. Hence, an injection sufficient to form a clot that will distend the sac of the aneurism the next day, this distension will be more considerable. And if the quantity of the liquid injected is too great, this distention will be calculated to produce the most deplorable results,—such as suppurative inflammation.

M. Vallette also insists upon the use of a well made instrument, one that will command well the liquid contained, so that the whole of it may be thrown into the tumor. It is necessary, also, that the opening should be very small, for if any of the liquid escapes through the mound, the cellular tissue will be cauterized, and a suppurative inflammation will ensue—which might be transmitted to the interior of the sac.

Finally, it is of the highest importance to isolate the aneurism by compression, for the coagulation of the blood is not instantaneous. if the circulation remains free in the sac, some of the perchloride will be carried into the arteries, and the coagulation will not take place in the sac, but in the vessels. He thinks such was the cause of the gangrene in the arm of one case that had been reported.

At the meeting of the Academy November 22d, the discussion was again resumed upon the method of Pravaz.

Mr. Laugier of La Pitie—said when our honorable compeer, M. Malgaigne, by his interesting memoir, drew the attention of the Academy to the treatment of aneurisms by the Perchloride of Iron, it appeared to me, that the question for decision was brought before us prematurely. I believed, that new facts would be brought before us, perhaps in a short time, that would be calculated to change our opinions, or the conclusions which our colleague demands. This often happens, indeed when such conclusions are formed, from a small number of facts. A great number of operations is necessary, before passing a judgement upon the real value of a new method of practice. But it is not required that every new operation should be

experimented with a long time, and numerous victims sacrificed before it is rejected, certainly not.

A new method should be reasonable, before one should think of trying it, it is necessary that it should have some analogues to serve as a point of support in science, and that will render its future success at least probable.

The details into which Mr. Velpeau has entered, have proved that the use of Perchloride of Iron in aneurisms offer these conditions; that operations more or less analagous have preceded them, and have thus to say, opened to them the door.

It now remains for us to know,—and it, is the only question brought before us by M. Malgaigne, if after having had the right to experiment with this new method, are the known facts of sufficient importance, to authorize us to reject it from surgical practice. The details of the cases reported by M. Malgaigne give unfavorable results, nevertheless, I believed that a decision upon its true value would be premature. I even believed, at the time of the reading of the report, that the most beautiful success would finally be obtained by the method of Pravaz. The treatment by ligature is often successful—but it cannot claim more than this—I wish to speak of the case cured by M. Valette of Lyons. However brilliant this success may be, I can conceive that M. Malgaigne, will not regard it, as decisive. Our colleague has not denied the possibility of success,—he has even regarded its existence out of the question; but this rare event, to him appears to have been brought by grave accidents, and in the actual state of things is counterbalanced by a very great number of reverses, and even by the death of many operated on, consequently he has concluded upon the proscription of the method.

In order to reply to the arguments of M. Malgaigne, it will not be sufficient to adduce cases of brilliant success obtained, by the Perchloride of Iron, but it will be necessary to submit the cases which he has analysed, to a new examination and to draw conclusions different from his own. A careful reading of the observations which were published before those of M. Valette, induced me to believe that, the part attributed to the Perchloride of Iron, in causing serious results had been somewhat exaggerated.

If the Perchloride of Iron, is to be considered as responsible for all the accidents observed, it would be necessary, it seems to me, that its effects should have been as much more manifest, as it was more concentrated when the quantity injected was more considerable.

Also, the operators should be more certain that they had carried the canula into the liquid blood contained in the aneurism. In studying the published cases, under these three points of view, to them answered in a manner different from what we should expect.

In the first case observed by M. Malgaigne, the liquid injected by one of his students, was a mixture of equal parts of the Perchloride and water. It was not very concentrated; five drops were injected, and was immediately followed by an atrocious pain; ten minutes after, the hand was cold and livid, and the day after, gangrene made its appearance. We will soon see why this has occurred; but it is evident that it was not owing to the concentration of the liquid. The same remarks will apply to the case of M. Alquié, five drops of the Perchloride of Iron mixed with an equal quantity of water, was injected into an aneurism of the Ulnar artery; the night following lancinating pains were felt in the tumor, the next day, the patient had a chill, his fingers were swollen and phlegmon on the fore-arm. Again we remark, that in this case as in the other, the concentration of the liquid was not the cause of the evil. M. Velpeau injected the first time, eight drops of the Perchloride, brought to him by M. Dubuisson himself. This time the article was pure, nevertheless no accident ensued, unpleasant effects were only perceived after a second injection, made twenty-one hours after the first one.

In the case of M. Lenoir, seven drops of the liquid mixed with water was injected, and then another injection of fifteen drops was made without any bad effect. How are we to understand that it is the same liquid, that at a later period, produced such grave accidents? The reading of these observations proves, that if it was not the concentration of the liquid, which caused these disorders, neither was it owing to the quantity used. Can we forget the injection made by M. Barrier of fifty drops of the Perchloride of Iron, which was followed by no bad result whatever? It was not until a third injection of twenty-five drops, that the inflammation attacked and finally invaded the tumor. Thus, we see that these accidents are not strictly proportional to either the concentration of the liquid, or to the quantity used.

Another fact of great importance, is that the plan of operating, has been very different, in different cases. In some, the extremity of the canula was carried into the liquid blood of the aneurism, at the moment the injection was made. In others the end of the canula

has only reached the clot, which has spontaneously formed upon the wall of the sac. How can the same results be observed under circumstances so different? An operation whose aim is to coagulate the blood, loses its object, it seems to me, when the end of the canula is only engaged in the clot already creating. It will be remembered that cases occurred, where 6, 7, 16, and even 25 drops were used without evil consequences. And again, we have seen very grave accidents follow the injection of a small quantity of the liquid, at a later period in the same case, but they were not caused by the injection, for in several cases, the bad effects were not manifested until a considerable length of time had elapsed after the operation. Such was not the case, however, when the canula was carried into the liquid blood, at the moment of injection,—which is truly the method of Pravaz—and which has been followed by brilliant success in some cases, and by the most deplorable results in others.

Unless the most careful precautions are used, the liquid will be carried beyond the aneurism, and may cause speedy gangrene, similar to that which destroyed the patient at the hospital of St. Louis; whilst upon the other hand, if the artery be carefully compressed above and below the aneurism, and this pressure be maintained for some time after the injection, the most happy success will be obtained, as in the case of M. Valette. But in how many aneurisms will it not be impossible to exercise this necessary pressure, and hence I agree with M. Malgaigne that there are many difficulties to be encountered in the use of Pravaz's method.

It is rationally inapplicable in aneurisms of the Popliteal Axillary, Subclavian, and Carotid Arteries, and particularly of the Arteria Innominata. Can it even be always used at the bend of the arm? The cases most favorable for its application are in aneurisms of the Humeral and Crural Arteries near the middle portion of the limb.

There is one condition, which to me seems to be established by facts, it is that success may be obtained from a single injection, as the case of M. Valette of Lyons; and here I arrive at a point of the question which has not been considered. The reflexions which follow, have arisen from the cases reported by Messrs. Velpeau, Malgaigne, Barrier, Lenoir and M. Soule of Bordeaux. They are calculated, if I am not deceived, to define the limits to the use of the Perchloride of Iron, and also to lessen in some measure, the reproaches which have been made against the method of Pravaz.

Every aneurismal tumor which has been punctured several times

and in which the canula has remained in the clot, or even carried as far as the liquid blood contained, will almost inevitably be invaded by inflammation. The same thing happens as in punctures of encisted tumors, a single puncture may not cause inflammation, whilst a second or a third is almost certain to do so. But to confine ourselves to aneurisms. Is not the same result seen to follow Electro-puncture of these tumors? Cases of this kind are numerous, where the repeated introduction of the needles was the cause of the inflammation, I believe such is the case, in the use of the Perchloride, where the canula has only been carried to the clot in the outer part of the cavity of the sac. Examine the case of M. Velpeau, the first puncture produced no change, the second was followed by unpleasant symptoms. Can it be that the Perchloride of Iron, has a deleterious influence upon the clot? Twenty-one days passed after the first injection without any appreciable change, another injection was made, the same precautions being used, but again it was thrown between the layers of the clot, this was soon followed by inflammation and augmentation of the tumor. How can we demonstrate that this time the bad effect was caused by the Perchloride? In the case of M. Barrier, three punctures and the injection of seventy-five drops of the Perchloride were made before the tumor became inflamed. What a terrible inflammation should have been expected from such a dose of the liquid, yet the inflammation produced in this case was not more violent, than had been observed in the others.

In the case operated on by M. Lenoir two injections were made,—and as M. Malgaigne himself has said, there was no effect either good or bad, a third injection was with a smaller quantity of the liquid, and why should it have produced a greater effect? But at this third operation two punctures were made—one of which was by the canula, and was believed by M. Lenoir at the time, not without danger. It is true, that a crural phlebitis appeared to be the cause of death in this case, but an inflammation of the sac, had also been the result of the operation.

In the second case of M. Malgaigne, four punctures were made during the same operation, the two first were with a canula, which was judged to be too small, and a larger one was substituted. At the second puncture the canula was carried to different depths and in various directions, in order to find the current of blood, in which they did not succeed, hence it follows that the liquid was thrown into the substance of the clot. Six drops only were injected at the fourth

puncture, and this is probably the smallest quantity that was thrown into the tumor. Well, read again the narration of M. Malgaigne, he has depicted, with his accustomed energy the horrible suffering of his patient, with the rapid increase in size and the rupture of the aneurism. How can we admit that such effects were caused by six drops of the Perchloride of Iron; was it not rather owing to the repeated punctures, and the movements of the canula, which our colleague in his sincerity has related. I hope, gentlemen, that no person here, and particularly M. Malgaigne, will think that I am disposed to censure any one of the skillful surgeons, who have experimented with the method of Pravaz. The operations in the majority of the cases, have been performed with the greatest prudence. But it is wrong to attribute the effects entirely to the influence of the Perchloride of Iron, or to electro-puncture—whilst but mediocre importance is attached to the irritation produced by repeated punctures, and the movements of the canula made in seeking for the current of blood.

In conclusion, before judging the method of Pravaz in the treatment of aneurisms, it appears to me, indispensably necessary to make two categories of facts—First, those resulting from the introduction of the canula into the liquid—and secondly, those which arise from the injection being thrown between the layers of the clot already formed. The last, in my eyes, are only aneurisms treated by a mode of *acu-puncture*. The effect of a single puncture may not be seen, but serious accidents must necessarily arise, when they are often repeated, and in general they will be in proportion to the number of punctures made. In cases of this kind it is difficult to conceive that any real effect has been produced by the liquid injected. How can a liquid, which acts only by virtue of its chemical properties, be inert during the first injection and yet produce violent effects at the second or third? The poisoning and the dissolution of the clot by an excess of the Perchloride of Iron, are still but hypotheses. Another explanation has been given by M. Velpeau, that shows on the contrary that the clot, by its influence is indurated in such a manner as to become a foreign body, whose elimination will become necessary. These opposite views upon its action, has not escaped the attention of M. Malgaigne, who has alluded to them in his report. For myself, after a careful study of the observations made and published, upon the treatment of aneurisms by the Perchloride of Iron and Galvanism, I have sought in vain, to find a difference in the

blood which is contained in the sac. It is the same, as found in cases of spontaneous inflammation or where it has followed the ligation of the artery.

Here again, I will cite the case operated on by M. Soule, a jet of blood following the introduction of the canula showed that it was well placed, for making the injection,—it was done, no effect was produced, it was only after a second puncture that the inflammation was produced.

The method of Pravaz when badly applied, or when not conducted upon regular rules, can produce the most terrible effects. The method exacts a compression wisely applied, both above and below the tumor, which must be continued for fifteen or twenty minutes after the operation. The injections of the Perchloride of Iron should never be attempted without these rules being strictly observed: It would be correct then in M. Malgaigne to proscribe them.

But the conditions, where these rules can be applied, are only found in a small number of aneurisms, as for instance in the case of M. Valette. How are we to prescribe a method for such cases, where success attends the first attempt, and which are not followed even by the sad effects which often result from the ligation.

This, I say must be in cases where the first attempt has succeeded, for a second puncture may cause inflammation which may be dangerous to the patient and compel the surgeon, finally, to have recourse to the ligation. Our judgment of this method should be in accordance with these facts. Repeated punctures and forcibly made in these cases—in contributing to these fatal results—should be well considered by the Academy. In conclusion, I repeat, that I think that the definite judgment upon this question, claimed by M. Malgaigne—is at this time premature.

M. Gerdy followed, and after protesting for a long time against the indirect accusation, which the orator had made against those persons who are always ready to condemn, he continued as follows: In the present condition of things the case of M. Valette, has in nothing changed my convictions. I think that it is our duty to stop and reflect for a long time, before attempting a new surgical operation upon living man.

For myself, I will not do anything, without being well acquainted with all the good and evil, which are presented by the published facts, and it will be only after a great number of satisfactory experiments upon animals, that I will decide to attempt it on man. This

is the only way of proceeding—if we wish to be governed by prudence. It is much better to know how to wait—rather than to march too rapid.

M. Malgaigne arose and said: I come gentlemen to re-establish my conclusions. All that has been done is bad—if new facts are to be discovered, it will not be by experiments made upon man. We shall see.

I will reply in the first place to M. Giralde, who has written a letter to the Academy and placed me upon trial. He demands where I have obtained the necessary data for condemning his experiments, the report of which is contained in a sealed letter. M. Giralde is deceived, he has effectually, published his experiments, they are contained in the official report of the Surgical Society. These experiments were made upon a horse and an ass, and they were bad. In the first experiment too much of the liquid was injected and the coagulation was not produced. A new dose was then used, making in all 17 drops, and it caused induration of the artery. In the second case also induration of the artery was produced. This hardening, M. Debout has said, was the effect of too strong a dose of the Perchloride.

I now come to M. Velpeau, who has said, that the facts known—are not of sufficient number to justify at present the judgment of this new method. The case, which to him appears the most grave, was the one reported by M. Malgaigne, and in which a terrible gangrene was established. But this accident is not the only one, it has been seen under the skillful hands of M. Velpeau himself, unlikely as this may appear, I have seen it. Will any person alledge that the indispensable precautions were neglected?

The young physician who made the injection in my case, and in whom I have full confidence, has informed that he observed all the precautions which had been indicated. I have experimented also, and have seen it produce formidable accidents. Now, perhaps, they will find new precautions to be observed. M. Jobert was not able to prevent gangrene in his case, where the Perchloride of Iron was injected. What happened to a man without a name, has also occurred under the hands of a distinguished man. Do not say, therefore, that the operations have been made without precautions. These precautions, no person knows them. M. Velpeau says, let us take another precaution, inject a smaller quantity of the liquid and make the same careful compression above and below the tumor. Well,

look at the case of M. Lenoir, two injections made were entirely harmless, a third made with only six drops of the liquid caused the most distressing accidents, and he was only too happy in being able to use the ligature.

The occurrence of gangrene is a grave accident, and it is a serious thing to be compelled to have recourse to the ligature in cases where no other plan will suffice.

Gangrene will result from the injection of too large a dose of the Perchloride—and again no effect will be produced if the quantity injected is too little.

Well, gentlemen, what are the conclusions of M. Velpeau? He thinks that Pravaz's method may be used in aneurisms at the root of members; now it is in such that I would be the most afraid to use it. Again, it has only succeeded in small aneurisms. Carried away by a desire of doing good, M. Velpeau has given utterance to hopes that can never be realized.

I now come to the case of M. Valette, who used a different kind of Perchloride of Iron from that used by us. M. Dubuisson has said, that the experiments made in Paris were not with his Perchloride. It is certain that when in Paris, he placed in the hands of several Surgeons the Perchloride, which he had of M. Rousseau. Concerning the above, I entertained some doubts, and I enquired of our honorable colleague M. Loubeiran, who informed me that M. Dubuisson understood nothing of the preparation of the Perchloride of Iron. M. Gobley, who has for several years, under the direction of M. Loubeiran, occupied in its preparation, has also given me the same statement. M. Dubuisson has asserted that his concentrated Perchloride of Iron contains Hydrochloric Acid, I believe it truly, for it is very badly prepared. It is easy to make a concentrated solution of it, that will contain none of the hydrochloric acid. When well made there is no deposit in it; M. Dubuisson has sent some to the Surgical Society, which forms a deposit, therefore, it is not a good preparation, and yet it was with this bad specimen of the article, that they have operated in Lyons.

Let us pass to the wise criticism of M. Laugier, he has made a skillful dissection of the cases which I have reported. According to him, the bad results have been owing not to the concentration of the liquid, neither to the quantity used, for in several cases a considerable quantity was injected. What, then, is the cause of these accidents? He believes it to be dependent upon the idiosyncrasy of

the patient. This is a strong condemnation of the method. I profit by the excellent discourse of M. Laugier, in order to say: Take as small a quantity of the Perchloride of Iron as you may wish, you will be free from the bad accidents. M. Laugier has said, very justly, that it was the repeated punctures which have caused the unhappy effects, and I am glad to have him on my side in this particular. However, there has been several cases, where repeated punctures were made, without being followed by any bad accidents. As far as I am permitted to judge, it is the presence of a foreign body which is the cause. The injection of so small a quantity as six drops has not been able to cause such accidents as has been observed in other cases. The majority of Surgeons will believe, conscientiously, that these sad results should be attributed to the presence of a foreign body, for myself, I confess, I am of that opinion. M. Laugier, restricts much the employment of this method, he limits it to small aneurisms. But will he bring before us new cases operated on? I believe him too prudent to do that.

I will analyse, also the case operated on by M. Valette, it was performed in opposition to all rules, yet it was in this manner that the two first experiments have succeeded in curing their patients.

Into an aneurismal sac which contained nearly one ounce of blood, M. Valette injected 15 drops of the Perchloride, after having said that 10 or 12 drops was sufficient. Where has he obtained his terms of comparison? M. Dubuisson has said that 5 drops was sufficient. M. V. injected three times that quantity. It was for this fault that M. Sallemant reproached the first experimenters. Does the success of this case deserve to be so highly lauded? If it had been followed by grave accidents, M. Dubuisson would have said that too much liquid had been injected, and he would have thus borne all the responsibility.

Who, then, will guide us in the employment of this method—Experience? Experience of whom? upon whom? and at the expense of whom? How many will it be necessary to kill, in order to fix it? Behold to what is reduced this famous fact of M. Valette, who has had the happiness of curing one patient, M. Dubuisson himself would have turned against him, if the issue of the case had proved unfavorably.

In what cases, is it then, necessary to have recourse to the Perchloride of Iron? It would be imprudent to use it upon large aneurisms, situated at the root of the members; here the Surgeon would

incur too much responsibility. In small aneurisms, the ligature acts most kindly. Sydenham has truly said, that at the commencement of an Epidemic, the first patients that are treated pay for remainder.

Among all the operations which belong to the domain of Surgery, or of those who have been rejected, there is not one which has given such deplorable results as this.

Ligation of the artery in the treatment of aneurism is not the last word in Surgery. Our neighbors on the other side of the British channel cure them by compression, and are astonished to see us remain so faithful to the ligature. For my part, I have once tried the plan of compression but my patient was not able to endure it. New operations should not remain in the hands of rash persons.

When, by experiments upon animals, another method is discovered that will give results in an inverse proportion to that of the method of Pravaz, even adding the success of M. Vallette (this unhappy success, for it may lead to new attempts) I for one will be eager to adopt it. But as for the perchloride of iron, that is a question judged, and it will be only the imprudent Surgeons who will have recourse to it in the treatment of aneurism.

At the meeting of the Academy of Nov. 29, after disposing of some preliminary business. Two letters were read, the first from M. Dubuisson, accompanied by papers, after analysing carefully, the Academy justified the strictures of M. Malgaigne upon this point.

The second letter was from M. Giralde, in answer to the remarks made by M. Malgaigne at the last meeting, condemning the experiments which he, M. G., had made upon animals at the Veterinary School at Alfort. His letter was well written, but is too long to introduce here, but his conclusion is as follows: "The object to be ascertained was, whether a few drops of the perchloride of iron, injected into vessels, would produce immediately the coagulation of the blood. Now the experiment has succeeded, and in order to ascertain if anything was wanting in the experiment, it would be necessary to know the degree of density which the liquid possessed,—both that which was employed by Pravaz himself, or by us. M. Malgaigne was ignorant of all this, and yet without sufficient information, and by his own personal authority, he declares boldly before the Academy, that our experiments have been badly made. This manner of proceeding has something strange in it, but thank God the Academy has not accorded to any one of its members, the right of condemning any thing of which he has but an imperfect knowledge.

M. Malgaigne, then communicated some information which had been furnished him by an honorable confrere of Lyons, which invalidate some of the assertions of M. Dubuisson. I learn, 1st, That M. Barrier has also had reason to deplore accidents from the use of the perchloride of iron, 2nd, That M. Petrequin, after numerous disappointments with the perchloride of iron, has endeavored to replace it by the perehloride of iron and manganese, which last, he believes to be more inoffensive. 3rd, That M. Petrequin, who the French journals say, never employed this method, declares on the contrary that he has employed it once. This declaration is made in a communication from him to a journal of Belgium. Now it is true that he has employed it one time, and it is not less true that his patient died. 4th, That the method of Pravaz counts at present five deaths out of twelve persons operated on for aneurism.

M. Roux said that it would seem from the great importance which is attached to this discussion, that Surgery was about being deprived of its resources against aneurisms, and yet everybody knows to what a degree of perfection and certainty the ligature has attained. The subject does not merit the degree of interest which it has inspired. M. Velpeau was correct in saying that the method of Pravaz was not a new one, but only the continuation of numerous attempts which have been made, for the purpose of coagulating the blood in the interior of the vessels, only there is a reconciliation which M. Velpeau has attempted, and which does seem legitimate when he speaks of the action of cold upon aneurismal tumors. This kind of procedure is calculated only to retard, and not to arrest the circulation—nor should it be disdained, for I have seen it succeed a number of times. The inventor of it pretended that it would always effect a cure, but its trial in Paris proves that it is but rarely followed by success. This fact gave origin to the saying, "That the water of the Seine did not possess the same properties as the waters of the Garonne." M. Guerin, the inventor of this method, practiced in a village of Gascogne.

I am astonished that M. Velpeau, who is so conversant with the progress of the art, should have omitted *compression*. A Surgeon who is still living, has said that a momentary compression was sufficient to form a slight clot, when it was applied upon a part of the artery, between the aneurism and the heart.

M. Roux then entered into a minute inquiry of facts, in order to

ascertain to whom the discovery of the ligature belonged,—sometimes attributed to Hunter, sometimes to Anel.

After which he continued: I will suppose for an instance, that the Perchloride of Iron may possess all the advantages which has been attributed to it, that we are certain of the particular change which it determines in an aneurismal sac, and that we know all the rules that should govern its administration, and that grave symptoms will not follow its use. Well, even granting all this I would still give the preference to the ligature, whenever its use was practicable. But on the contrary, it is necessary to acknowledge that we have no certain knowledge of the rules and conditions which should govern us, in the injection of the Perchloride of Iron, and the proof of this is found in what M. Laugier has said—and which has drawn my attention particularly to the case of M. Valette, who has broken through all the rules laid down by Pravaz. Let us see if the perchloride of iron is better adapted to the treatment of Varices. Fifteen years ago an Italian Surgeon informed me that he had obtained happy results in the treatment of Varices, by ligation of the internal saphena vein. I have performed the same operation fifty, sixty, or perhaps a hundred times, without any bad results. At this time I have in my wards, four patients who have been recently operated on for this affection, and they are doing very well. Therefore I will never consent to abandon this inoffensive and sure method, for the injection of any fluid whatever. But to return to aneurisms. Has it never been observed that there is a great difference between the state of a vessel in which there is an aneurism, and that of a healthy artery? In the last, injections can be made without incurring much danger,—but such is not the case if the internal coat of the vessel is diseased.

I have performed ligation of large arteries 84 times, of this number, I used the method of Hunter in 66 cases. Ten of these were false consecutive aneurisms. Every one of these 10 have been cured. Therefore I say that I never will have recourse to the perchloride of iron, in false consecutive aneurisms,—and which are often met with at the bend of the arm. I have used the ligature in 33 cases of spontaneous aneurism, 27 of which were upon the popliteal artery, and almost always I used the method of Hunter. After so long a practice with the ligature, I must certainly have been able to recognize its value, and hence I cannot wish that it should be supplanted by a dangerous method.

After having enumerated the various accidents which should be

apprehended from the use of the perchloride, the learned Professor said that during his long career he had seen only three cases where gangrene followed the use of the ligature, and two others where inflammation had been produced. He feared that we would not be able to diminish the bad accidents of the perchloride. At the present day said he, novelty has too much attraction for certain restless spirits. There are many of them who are tormented with the idea of innovation, but it is not right to change any, merely for the pleasure of changing.

M. Velpeau said that the question under discussion was the value of the perchloride of iron, yet the debate had been carried to the relative merits of different methods for treating aneurisms. Even a part of it has been upon the morality of the question—M. Gerdy had assumed this part of it,—he did not censure any person in particular,—the honorable orator had preferred to accuse everybody. Lastly, M. Malgaigne not being present at the moment of my remarks, has attributed words to me, which I never uttered. I have not denied the possibility of gangrene of the arm, in the case which has been mentioned, but I thought it very strange. This is all. How could I have been able to deny a fact affirmed to by M. Malgaigne? Neither have I absolutely rejected the method of Pravaz, but I entertain doubts from the want of facts, either for or against it. I have said, provisionally, that we could try this therapeutic agent in aneurisms situated at the roots of members.

By rejecting definitively this method, we may place a great obstacle to future progress, for the happy discovery may yet be made, that will be able to coagulate the blood in aneurismal sacs. But will this be from another agent than the Perchloride of Iron? This, no person can tell. For myself, I do not believe that it will be the Perchloride; yet let us be persuaded that this liquid does not act here as an irritant. I am certain of this, for I have used it freely as a hæmostatic agent, in the dressing of wounds, and never saw it cause the least inflammation. If the Perchloride is injurious it is owing to other properties. It is important to assure ourselves of the obliteration of the vessels after the formation of the clot, and to do this, it is necessary to continue the experiments upon animals; the subject is worth the trouble. I will say, en passant, that it is astonishing to see a Pharmaceutist interfere in this discussion. Evidently M. Dubuisson has nothing to do here. I cannot understand why M. Malgaigne should consider the case of M. Valette a bad one, only because it is in opposition to his own views. This is neither just nor

logical. M. Valette is a man occupying too high a place in science for any one to doubt his assertions. We have not, then, the right to reject this fact. If the Perchloride of Iron is not suitable for Aneurisms, it may, perhaps, be applied to the treatment of Varices, or will serve at least as a Hæmostatic, which alone would be valuable. M. Giralde has injected it into veins, and produced their obliteration without accidents. Nevertheless, I am no advocate for its use in Varices, because I believe they cannot be cured by any process whatever. I have ligated varicose veins, about 250 times—the same operation which M. Roux says he got from Italy, at a time that he could have found it fully described in a book in his own library. By this means I obliterated the veins, but the varices reappeared and the patients returned to the Hospital. I have done more. One day I excised one inch and a quarter of a Saphena vein, in order to be certain of preventing the re-establishment of the circulation, by interrupting the continuity of the vessel. Malgre all this, the patient returned to La Charite, ten years afterwards, with varix in the same situation. Now I will give a little advice to experimenters. I have actually seen in animals, the clot which had been caused by the Perchloride of Iron, form an adhesion with the internal wall of the artery. But would this occur in an aneurismal sac, where the vitality is less and probably not sufficient to produce the required organic work? Another point of importance is the fact that the opening into the artery is not always opposite the tumor. In these cases, the obliteration of the tumor does not cure the aneurism, for it is only the blood in contact with the Perchloride, that is coagulated.

Far from condemning those persons who will continue to experiment with the Perchloride for the purpose of attaining better results, I believe that it is very desirable that this question should be well studied.

In conclusion, I will reply to what M. Roux has said concerning refrigeration in the treatment of aneurisms. The experiments made and reported by me, have had for their object, the solidification of the blood in the sac, by congelation, and which was obtained from a mixture of salt and ice. This practice is essentially different from that of M. Guerin, who employed cold, only for the purpose of diminishing the normal temperature. I have said that I was thus able to produce clots; but they were soon dissolved and the disease returned.

M. Leblanc submitted to the Academy several pieces of arteries taken from animals, which had been injected with Perchloride of Iron. These pieces proved the fact, that vital adhesions can be established between the walls of the vessels and the clot which has been caused by the Perchloride.

M. Malgaigne demands a hearing at the next meeting of the Academy.

I will give you the verdict of the Academy in my next letter. I have been compelled to condense these speeches.

During the past ten days I have seen two patients operated on, the results of which have greatly diminished my faith in the diagnostic powers of some of the great men here. One of my private courses afforded me the opportunity of making a careful examination of both of these cases. The first presented all of the rational signs of a case of Ascites, dependent upon organic disease of the heart. The second case was a disease of the blood vessels of the left side of the neck and face, the subcutaneous veins were enlarged and varicose, a small tumor was present over the carotid at its point of division, which gave a thrill or purring to the touch, and a strong bruit de souffle to the ear, erectile tumors, large as a hickory nut, were present upon the inner side of the lower lip, left cheek, and smaller ones upon the tongue, and a discolored tumor occupied the floor of the mouth, making the integuments prominent below the chin.

Well, the first case was diagnosed to be a large ovarian cyst, and was operated on by first drawing off the fluid and afterwards injecting a solution of Iodine. The patient after suffering from a violent peritonites, died on the fourth day after the operation. The Autopsy exhibited very extensive disease of the heart. The abdomen showed a large number of thick false membranes, some of which were attached to the abdominal wall above the umbilicus. There was no ovarian cyst.

The second case was diagnosed to be a compound affection. 1st, Varicose aneurism between either the upper extremity of the primitive carotid and the internal juglar vein, or between the external carotid near its origin and a contiguous vein. 2nd, Erectile tumors of the lower lip, left cheek, and tongue; and 3d, à Ranula. The operation for Ranula was first performed, and, as I fully expected, nothing but blood followed the trocar. The Surgeon believed that he had wounded one of the ranine veins, but as

the blood welled out too fast, he did finish the injection of the supposed cyst. This woman was attacked with violent inflammation, delirium symptoms of prevalent absorption, and died on the fourth day. A post mortem examination revealed a varicose aneurism, and in fact, confirmed all of the diagnosis, with the exception of the ranula.

The man who had almost all the bones of the right half of his face removed by M. Massoneune to which I alluded in my first letter, is still an inmate of Hospital Cochin. He eats and drinks without assistance, and even walks about the wards. The large cavity is about as large as it was on the day after the operation. M. Charriere, the celebrated instrument maker, has promised to supply him with an apparatus that will remedy the deformity, but he will have a difficult task to perform, after M. Massoneuve is done with him.

A tumor has appeared on the remaining cheek, painful and indurated, which the Surgeon intends to remove likewise. If the poor fellow recovers after all this mutilation, he will present but a sorry figure.

On Nov. 7th, threw open the doors of the Ecole de Medicine, and the vast hall was densely crowded by Students and Physicians, to witness the distribution of prizes and to hear the eloquent lecture of M. Bourchardet. He pronounced eulogies upon the lives of two of his deceased colleagues, M. Royer Collard, and M. Richard.

The winter campaign is fairly opened. In addition to the regular lectures at the School of Medicine, and those given by the Clinical Professors in the Amphitheatres of the Hospitals, there are a large number of Aggreges and others engaged in lecturing upon various specialties, at the Ecole Pratique, Clamort, and in many private rooms in the Latin quarter. They all afford rich instruction to Students.

The Cholera is gradually increasing in spite of the frosts of winter. I have before me the number of Cholera cases that were in all the Hospitals (Civil and Military) of Paris. On the 28th of November, the whole number amounted to 172; of these, 115 had been brought in from the city, 57 originated in the Wards of the Hospitals; 77 had died. I do not like their method of treatment.

J. P. JUDKINS, M. D.,

Prof., etc., Miami Med. College of Cincinnati.

ART. II.—*Hints on the Causes of Blindness.* BY WM. CHAPIN, of the Pennsylvania Institution for the Instruction of the Blind.

MR. EDITOR :

I desire to communicate, through your useful Journal, some facts illustrating the hereditary tendencies or predisposition to blindness. The facts will apply with equal force to deafness, insanity and other congenital infirmities.

The popular belief is, that blindness and deafness, when congenital, may often be traced to blind or deaf parents or to some previous generations. Hereditary insanity is more evident than either of the other afflictions. But it will be found, on examination, that transmission, from like infirmities, is comparatively very rare, in the cases of the deaf and the blind.

In respect to the last class particularly, the writer has had some opportunities of observation. From the statistics furnished by the Institutions for the Blind in this country and Europe, I am able to state that the prolific cause of blindness, inherited from birth, is the *intermarriage of relatives*, particularly of *first cousins*.

The tendency of such marriages to produce an inferior or diseased offspring, is a physiological fact well established. Idiocy and insanity in the same family, with blindness, is not an uncommon occurrence, where the parents were first cousins. The writer knows one family of *seven* blind children ; another of three blind and one idiot child ; several of two blind each, and an indefinite number with one blind child in each, the parents being cousins. Two brothers married two sisters, who were cousins—Each family had one blind daughter. The facts are so usual, that wherever more than one deaf, blind, or idiot child, is found in a family—it may, fairly, in most cases, be referred to the above cause.

The writer, a few years since, examined the "*Hospital Royale des Quinze-vingtz*," in Paris, with reference partly to this subject. This is the celebrated hospital for "*fifteen score*," or three hundred blind persons, founded by Louis IX, in 1260.

These blind persons are encouraged to marry, sometimes with each other, but generally with persons outside. The community numbers 370 in all, in 245 distinct families, of whom 113 are children born in the house. All these children have one or two parents blind. If blindness, therefore, tends to transmit blindness in many cases, we should certainly find this hospital one of the most favora-

ble places to prove it. But, on the contrary, and I confess to my surprise, *not a blind child had ever been born in the house.*

It would be incorrect, however, to infer from so striking a fact, that blindness is never transmitted by blind parents. I know a young lady whose progenitors, for five generations, have been blind, at least one of the parents, in succession.

Sometimes nature appears to be eccentric in her operations. A lady in Ohio had three blind children. Neither the parents nor grand-parents of the children were blind. But the lady's *brother* had two blind children, and she had also two *uncles* blind. I have known of some twenty marriages in this country, in which one party was blind, and several where both were blind; but the offspring in every case have good sight.

What then are the chief causes of blindness? In England and Ireland, *Small Pox* has produced more blindness than any other known cause. In the Liverpool Asylum, from its foundation, there had been 229 cases, or one-fifth of the whole number, from Small Pox. Of 1296 blind persons, from two asylums, the following are noted as the principal causes:

Blind from birth	-	-	-	-	-	123
Small Pox	-	-	-	-	-	258
Inflammation	-	-	.	.	-	429
Cataract	-	-	-	-	-	139
Accidents	-	-	-	-	-	135
All other causes	-	-	-	-	-	212

Inflammation, or Ophthalmia, is a rather indefinite term in such reports, covering a multitude of cases attended with inflammation, where the precise cause is obscure or unknown.

There are, for example, many cases of children born with good sight, but with a constant tendency or predisposition to blindness, in whom the slightest accident or exposure to cold, produces inflammation and loss of sight. A slight injury develops the hidden weakness of the organ. There were two blind children, a brother and sister, in one of our institutions, who lost each of their eyes, though apparently sound, by four separate accidents—some of them so slight, that a perfectly healthy eye would scarcely have suffered.

In this country, small pox has caused comparatively very little blindness. According to the Register General's Report, of Great Britain, between four and five thousand persons were blinded by it, in England and Wales alone.

Of 118 blind children received into the Ohio Institution up to 1846, only one had been blinded by small pox. And of 237 children received into the Pennsylvania Institution, at Philadelphia, only 10 became blind from small pox.

The statistics of that Institution, where a careful register is kept, show the following results, which are important, as presenting a fair general average of the causes of blindness in the country at large, viz :

Opthalmia	-	-	-	-	-	-	74
Amaurosis	-	-	-	-	-	-	32
Cataract	-	-	-	-	-	-	20
Congenital	-	-	-	-	-	-	18
Small Pox	-	-	-	-	-	-	10
Scarlet Fever	-	-	-	-	-	-	6
Measles	-	-	-	-	-	-	6
Accidents	-	-	-	-	-	-	43
Other causes	-	-	-	-	-	-	28

Total 237

Of this whole number, 85 were born blind, or lost their sight during the first year ; 45 over one and under five years ; 31 between five and ten ; 36 between ten and twenty, and 26 over twenty years of age.

These facts show the large number who are born blind, or become so in early infancy. More than one-third of the whole were blind under one year old, and nearly one-half before the third year.

Of the 10,000 blind persons in the United States, we may assume that 7,000 are under 35 years of age. Of this number, about 3,400 were blind at birth or before the third year.

All the facts above, only illustrate, perhaps, the general law of hereditary tendencies, not of disease transmitting its like, for exceptions in the above cases, appear to be the rule ; but that certain constitutional conditions in parents, produce peculiar defects in their offspring. Such being Nature's law and her severe penalties, it is very important that a full knowledge of it should be spread, and the unhappy results, as far as possible, avoided.

W. C.

Philadelphia, December 10, 1853.

ART. III. *Treatment of Delerium Tremens, by the internal administration of Chloroform.* By F. T. HURSTHAL, M. D., Massillon, O.

In the American Journal of the Medical Sciences, Dr. Pratt, of Baltimore, Md., records 2 cases of Delerium Tremens, treated by the internal exhibition of Chloroform, with most happy results. Subsequently Dr. Butcher, in the Dublin Medical Press, details an aggravated case of this disease, in which the usual treatment did not in the least mitigate or control the morbid action. Having read the cases of Dr. Pratt, he determined to give his sufferer the benefit of the internal use of Chloroform; 2 hours after the first dose was given, he found his patient in a tranquil sleep, and in 48 hours from that time, had the pleasure of declaring him convalescent.

The following case occurred in my practice a short time since, and as it fully sustains the very favorable reports above referred to, I have transcribed it for your Journal, believing that many of its readers may not have had an opportunity of seeing the works above alluded to.

D. R. G., aged 48, has for the last 7 or 8 years been in the habit of the free use of intoxicating liquors. From his very amiable and intelligent lady, I learned that this is the third attack he has had of this terrible disease, that for the four or five weeks last past, he has indulged in the accursed cup to excess. By the interposition of kind friends, he was induced to cast from him, the "damning liquid fire," that was rapidly absorbing every generous impulse of his nature, consuming his property, and bringing disgrace and ruin upon his interesting but unhappy family.

After thirty-six hours abstinence, (at which time I was called,) unmistakable evidences of Delerium Tremens presented themselves! I found him moving about the house with that expression of "wild anxiety," peculiar to this disease, depicted upon every feature; at one moment calling a friend, the next responding to a supposed interrogatory of his friend; by a strong effort, his mind could be controlled, but the moment it was left to itself, it was in the "dream land." Upon lying down, vermin of every describable and indescribable form annoyed him much; now fear would take possession of his hallucinations, covering himself up with bed clothes, he would earnestly beseech them to lock and bolt the doors.

As evening advanced he became more and more irrational; about 10 o'clock P. M., reason was entirely dethroned, incoherence complete, and illusions more frightful. The case now wore a serious aspect. Delirium Tremens with all its demoniacal symptoms, was in full possession of its victim. Pulse 130, somewhat firm,—tongue dirty, white coat, and dry in the center, breathing spasmodic, subsultus,—surface of body bathed in a cold clammy sweat, hands and feet cold—with great difficulty can be kept in bed,—has taken in the last six hours $1\frac{1}{2}$ gr. Morphia,—directed Morphia $\frac{1}{2}$ gr. every two hours till sleep was induced,—hands and feet to be rubbed frequently with dry flannel—jug of hot water to the feet.

Wednesday, 6 A. M., passed a very bad night; about 3 A. M. had short naps of 10 or 15 minutes duration,—is growing worse—pulse 130 and feeble breathing as before—sweating continues, had his shirt changed three times during night. $4\frac{1}{2}$ gr. of Morphia has been given in about 30 hours, determined to wait a few hours, hoping that the Morphia would control the symptoms and procure sleep. At 9 A. M., I was hastily summoned—all the symptoms aggravated—pulse very feeble—breathing bad—profuse cold perspiration, hands and feet cold and shrunken. I now concluded to abandon the opiate treatment, and exhibit Chloroform as directed by Dr. Pratt—

R	Aquæ Camphoræ.....	3ij.
	Chloroform	3j.
	Water sweetened	9 s.

to be taken quickly. Seating myself by the bed side, watch in hand, I anxiously observed the effect of the remedy. In 15 minutes, from a raving maniac, he lay quietly before me; in five minutes more he slept soundly, the peculiar catch, or spasmodic action of the diaphragm continuing—one hour after taking the Chloroform, his hands and feet became warm—and the body almost free of perspiration, in $2\frac{1}{2}$ hours he awoke, pulse slightly improved, general glow of warmth over the body, skin soft but dry—not falling to sleep after the lapse of 15 minutes—I repeated the dose, with the same magic effect of the first. It was found necessary to repeat the Chloroform every two to three hours to keep him asleep.

9 o'clock, P. M., patient improving, pulse 98, more full, skin continues soft, dry and warm, has the same condition of breathing, ordered bowels moved with Sedlitz Powders, Chloroform continued and increased half a drachm.

Thursday, 8 A. M., improving—slept well through the night, medicine administered three times in 14 hours—pulse 90, grows stronger—delerium more moderate when he awakes—no muttering during sleep—has taken considerable nourishment—bowels moved three times during night—breathing same—continue medicine.

Thursday, 9 P. M., has had a quiet day, at intervals appeared rational—knows his wife—has been much worried since noon by singultus—ordered sinapisms to spine and over insertion of diaphragm anteriorly, with almost instant relief—for the night.

R	Aquæ Camphoræ	- - - - -	3iv.
	Chloroform	- - - - -	3ij.
	Water sweetened	- - - - -	9 s.

to be taken at 10 o'clock and repeated if necessary during the night.

Friday, 8 o'clock, A. M., slept well all night—medicine repeated about 2 o'clock, A. M.—*is now perfectly sane*—takes beef tea occasionally—is much prostrated—from this time he improved rapidly, and was in two days able to attend in part to his business.

2 oz. of Chloroform were given in 48 hours.

Yours very truly,

FRED. T. HURSTHAL.

PART SECOND.

AMERICAN AND FOREIGN INTELLIGENCE.

ART. I.—JACKSON on *Bloodletting*.

Dr. SAMUEL JACKSON, formerly of Northumberland, read the following paper, on

BLOODLETTING.

Three weeks ago, I heard a discussion by the Philadelphia County Medical Society, on the use and abuse of blood-letting, wherein the inquiry was made, why physicians have been shedding less and

less blood during the last thirty years. One answer set forth that local bleeding had come more into use since French practice had been imported ; a second was, that the foulness of the air, luxurious customs, sedentary habits, and other evils attending the great extension of the city, had so far enfeebled the human body that much bleeding was every year becoming less and less admissible ; a third reason was pre-eminent for the comfort it would afford, if the people would only acknowledge its incontestible truth, that the great improvements gradually introduced into the art of healing, had rendered the lancet less necessary.

Each of these causes has no doubt had a share in the change, and, when taken in conjunction, they may be looked upon by some, as amply sufficient to account for our improvement in the use of bleeding, while, at the same time, they do the highest honor to practitioners of medicine, showing that they are not governed by prejudice, but are ever ready to profit by the developments of time.

The value of blood, as seen in the part that it plays in health and disease, has been very differently estimated at different times. The medical world was for many centuries overwhelmed by the humoral pathology, and the genius of the great Boerhaave finally wrought it up into a system, wherein acids and alkalies, and "alkalious salts," figured in the imagination and the writings of the whole profession. Soon after this, however, the blood is detruded from "this bad eminence," and an exclusive solidism, equally hypothetical, takes its place. But whatever is untrue, will not long continue, in these times of inquiry and induction ; hence the blood soon rose again into importance ; not by the activity of imaginative minds, but by patient thought and philosophical deductions, made in an age wherein the human mind could hardly go backward, unless to seize upon evident truth.

From this era, we may date our greater respect for blood, and our knowledge of the noble part that it plays in the animal economy ; from this, too, we may date our unwillingness to pour it out with as much unconcern as we did from sixty to thirty years ago.

But as extremes must always recoil on themselves, and cause the same extremes in the opposite direction, it behooves the professors of the healing art to be ever on their guard, lest they be led astray by this troublesome principle in the human mind. Horace imputes it to fools only ; yet time has clearly shown that wise men are not exempt. This is seen in the opposition that is now too strongly

made to bloodletting, by many practitioners of the present time. They show caricatures of the past, make not a few misrepresentations, use vituperative language, dazzle their own eyes with phantoms of pounds that were poured out years ago, and then felicitate themselves on their own safe and "middle way." But the physician who would derive the utmost advantage from bloodletting, must often run into extremes ; he must call up his energy when death stares him in the face, and sometimes bleed to fainting, sometimes refuse to draw a single drop ; and woe betide him if he fail in his duty through a desire of pleasing.

I am not attempting an elaborate argument, time does not admit thereof ; I shall merely express *pro virili* some feeble thoughts, that may possibly prove as words to the wise ; you know that the trumpeter in *Æsop* was looked upon as of more importance than the fighting men. It is, indeed, high time that some of our abler men should consider this *hæmatophobia*, which has now become prevalent and threatens, through various influences, to become an epidemic in our country.

When Rush, and Physick, and Griffiths, with their pupils and medical friends, undoubtedly saved many from the grave, by heroic bleeding in the yellow fever of 1793 and subsequent years, their copious effusions became very popular with physicians of the rising generation, and were transferred to the treatment of other diseases. This ought not to surprise us, when we consider the sincere happiness which physicians enjoy from any notable improvement in practice, and the enthusiasm that raises them above all selfish considerations. Rush was a teacher of medicine, and a religious and good man ; he felt it his duty to inspire his pupils with his own mind and soul. He not only recommended earnestly what he believed to be true, but felt bound to show that the small bleedings set forth in English works, were not adequate to the subduction of our American diseases. Physicians were found in every part of our country who had been taught in foreign schools or by foreign books ; hence they had not learned the proper method of treating our diseases of high excitement. Much of Dr. Rush's declamation, therefore, was directed against real prejudice and error thus largely diffused ; hence, like all other orators who have a just sense of their duty, and like all energetic philanthropists, he sometimes ran into exaggerations. Erroneous physiology, might have sometimes led him astray. He

thought that blood was very quickly generated, particularly from the patients' fat, the absorption of which was promoted by emptiness. This idea of quick restitution has been proven to be erroneous, and hence a good reason for caution, in pouring out the living fluid. But Rush quotes Haller's *Elementa*, to prove what immense losses of blood the body will sustain; now it must be observed, that the great physiologist saw not one of these cases himself; he quotes them from authors of authority, giving them his entire credence, as did Dr. Rush. *We are always ready to believe what we wish*, is an old maxim; moreover, who could call in question facts related and believed by Haller?

Dr. Rush has been abused no little, because he has said in his *Defence of Bloodletting*, that "it should be repeated while the symptoms which first indicated it continue—should it be till four-fifths of the blood contained in the body be drawn away." Now there never was, nor will there ever be a physician who may not make an erroneous computation; but let us see if there was no reason or excuse for this well-meant extravagance. The quantity of blood has never been ascertained; Haller supposed 28 lbs.; but the authorities since his time vary from 8.5 to 48 lbs. What was Dr. Rush's estimate I know not, but as Blumenbach was the reigning physiologist at that time, it is very probable that he took this authoritative man for his guide, and he estimates the amount to be from 8.5 to 11 pounds. Let us suppose, then that Dr. Rush went as high as 11 lbs., and you may call to mind that more than four-fifths of this weight have often been taken in a few hours, and sometimes lost by hemorrhage with perfect safety, even when there was no congestion to afford it. Such cases, Dr. Rush quotes from *Haller's Elementa*, ii. 5.

That sneaking scepticism which could question the authority of Haller, found no place in the generous, benevolent, and credulous mind of Rush; it is probable, therefore, that he did not care whether this great physiologist and good man saw these effusions himself. But Mr. Cline, Rush tells us, drew 320 ounces from a patient in St. Thomas's Hospital, in 20 days, and that Dr. Physick drew 90 ounces from Dr. Dewees at one draft. Now, if Rush based his calculations on 11 lbs., the greatest weight that Blumenbach ascribes, he did not err very much from his own intentions when he said, that bleeding must be continued "while the symptoms which indicated it continue, should it be till four-fifths of the blood be drawn away," for Haller's hemorrhages far transcended this point, while Cline and

Physick's effusions made near approaches thereto. But, however this may be, he was supported in his opinions by the practice of a host of pupils and medical friends, whose writings and colloquies could not fail to strengthen him greatly in his benevolent hopes. Dr. Physick was a lavish bleeder, and being at the head of surgery in the New World, and soon elevated to the professional chair, we must attribute to his precepts and examples much of the blood that has been wasted in the United States.

During my medical pupilage, which was conducted entirely in this city, I was a regular witness to the practice of these two great men, in the Pennsylvania Hospital, and a faithful attendant on three full courses of their lectures, with the greater part of the fourth ; from these opportunities of observation, carefully and often considered, I came to the conclusion long ago, that Dr. Physick was less sparing of blood than Dr. Rush. This, too, is the opinion of Dr. J. Wilson Moore, who spent five years in the hospital, and attended their patients, both public and private, having since, moreover, had many opportunities of observing Dr. Physick's private practice.

Dr. De Wees soon came into this field of labor, and lending a docile ear to the charming lectures and conversations of the eloquent teacher, he soon adopted the new practice into the obstetric art. Thus all three professorships of therapeutics were filled by men who would not call into question each other's profusion, but would rather afford mutual support and confidence.

Soon after Dr. Rush died, Dr. Chapman was placed in the chair of Practice, and he was far from being a sparing bleeder. What he taught in his lectures, I have no means of knowing ; but if he may be judged from his writings, he was, with respect to bleeding, a faithful pupil of his masters, Rush and Physick. His treatment of croup is this, as may be seen in his edition of Burns, and in the *Ph. Med. and Phys. Journ.* vol. i. He begins by puking freely with tart. emet., at the same time using the warm bath ; this failing, he bleeds *copiously*, and repeats the bathing and emetic ; this unsuccessful, he uses topical bleeding and a blister to the throat, from ear to ear ; all these failing, he bleeds to fainting, a remedy that had never failed in his hands at that time, the fifteenth year of his practice. Now this poor child puked twice freely, bathed twice, bled copiously, leeches, and blistered from ear to ear—this child, thus broken down, is to be bled to fainting. Truly, the author of this infallible method ought not to have written, as he has done, concerning what he calls "the sanguinary spirit kindled up in the year 1793."

But, omitting whatever Dr. Chapman taught, the chair of surgery was long occupied by Dr. Physick, and Dr. De Wees, was long a private lecturer, and then adjunct professor, after the death of Rush, so that this great man is not to be made answerable for all that effusion of blood of which we are now complaining. But the venerable Archiater is alone assailed by every tempest of abuse, as "the highest trees," says Horace, "are the most severely shaken by the wind, and thunderbolts strike the tops of the mountains."

Rush was not a headlong and indiscriminate bleeder; look into his *Defence of Bloodletting*; there you will find many earnest cautions, which will almost persuade you that he was timid rather than rash. When inflammation was threatening, under which no typhus lay hid, and this was certainly the case in the yellow fever, he often bled copiously; but in the manifest typhus, he seldom prescribed the loss of blood. He had been carefully educated in the school of Cullen, and had been early impressed with the radical difference between typhous and inflammatory fevers in cause, character and method of cure. Pringle, in treating of the camp typhus, says: "If the pulse was full, I generally took away some blood;" now what says Rush, in his note on this passage? Does he say I would have taken away a great deal of blood, according to my sanguinary spirit of 1793? Far from any such sentiment. He says: "There were *now and then* cases in which the loss of a *few ounces* of blood was found to be useful in the military hospitals of the United States." But we ought surely to suspect that our Americans would require more bleeding than the British, then occupied in Dutch Brabant, where Pringle says the sandy soil is every where underlaid by water at the depth of only two or three feet; where the moisture and corruption of the air were much increased by alternate floodings and exsiccations.

In his Lectures on Pathology, of which I have some notes taken by myself from his own mouth, he says, that in the Revolutionary Army, the officers often required bleeding in this fever, but not the privates, who were ill-fed and debilitated. And when the typhus petechialis was prevailing in the Eastern States, I well remember with what enthusiasm Rush hailed the publications of Dr. Elisha North, wherein bleeding was utterly condemned, and excessive stimulation used. He called Dr. North a worthy pupil of Sydenham.

It is in chronic inflammation that Dr. Rush may be suspected of carrying his principles too far. No man pursued these with more

ardor than he, and his opinions, too strongly expressed, may have led the inexperienced into error. It does not follow, however, that his own practice accorded with his vivid imaginations, for theories give way at the bed-side, and are lost in the light of experience.

He taught that a weak part invited disease, and predisposed to local inflammation, and such weak parts he knew that every human body afforded; hence his doctrine of the causes of dropsy, consumption, hydrocephalus, and other diseases. In his mind, every malady had a local origin, or it caused a local determination that ought to be sought out and eradicated. Some of our American physicians made a great ovation on the arrival of the *Phlegmasies chroniques* of M. Broussais; but if they had studied the lectures and writings of Rush, they would have seen that he, with respect to chronic inflammations, had fairly anticipated the French pathologist.

It was not, therefore, without some vexation, that I read in the year 1826, in the *North American Medical and Surgical Journal*, a review of Dr. Ayre on dropsy, wherein the writer says that some of the most intelligent of the English physicians, "so far from considering the French theories as dangerous and unphilosophical, are beginning to entertain similar views, in respect to the inflammatory nature of many diseases, too long regarded as resulting from a state of debility, and classed by the nosologists among the cachexiæ. You remember that Virgil, on being robbed of a single distich, wrote these singular and pointed verses:—

"Hos ego versiculos feci tulit alter honores;
Sic vos non vobis nificatis, aves;
Sic vos non vobis vellera fertis oves;
Sic vos non vobis mellificatis, apes;
Sic vos non vobis fertic aratra, boves."

But it is not my business at present to defend Dr. Rush; his writings, provided they be studiously read, and particularly his *Defence of Bloodletting*, are his best apology. If he sometimes ran into what might now be called extravagance, let us remember that he did this only in the ardent and benevolent cherishing of those feeble lights which he fondly hoped were the dawning of a brighter day. No man was more sensible than himself of the imperfections of his system, and therefore he often told his class that he was committing it to his pupils to be corrected or supplanted. Yes, O sainted shade, the total submerging of your doctrines, and even of your race and name, would have given you no pain, provided only that

mankind had been benefitted thereby, and the science promoted which you loved and cherished. True, indeed, is the inscription on your tomb: "Well done thou good and faithful servant."

I have said above, that extremes beget extremes in the opposite direction, that physicians seem to boast how little blood they draw, and that we are threatened with a general hæmatophobia. I have heard one great practitioner say that he has not drawn a pint of blood for a whole year; another says that he often goes out without his lancet; others say that any loss of blood is an evil not to be suffered, unless to avoid something worse. When I was in my juvenescence, probably about fifteen years old, I was overwhelmed one spring with sleepiness and oppression for several weeks, almost unable to make any exertion, or to keep open my eyes. I was bled for the first time in my life, and instantly restored to perfect health, vigor and activity. I have often met with similar cases, and have always cured them by bleeding. Surely this loss of blood was not an evil, or did we never hear of their being too much of a good thing? Here was no disease, organic or functional, nothing but simple hyperæmia that wanted a floodgate.

As to the opinion that loss of blood is an evil to be suffered only to avoid a greater, I do not find anything new in this choosing of the less of two evils. Men who have been doctorated, are surely too old to be taught this lesson. Would, they, like the schoolmaster in *Perseus*, feed us with pap and sing us to sleep with a *lala*? We are not now to be told for the first time that all good things have their concomitant bad things. The taking of our daily food is a very great evil; it costs money that had better be given in charity, or spent in some intellectual gratifications; it wastes much precious time; it leads people into the temptation of eating too much, thus injuring their health; a thousand evils might be found in a few minutes, yet no one declaims against eating, no one calls it an evil to be tolerated only to eschew a greater. But I am wrong; for Hierocles tells us, that a certain Athenian thought it a great evil to feed his horse, and thought he would teach him to live without eating; the horse learned the lesson, but having learned it, he died. I would then recommend to all my brethren who look upon bleeding as an evil, and are desirous of learning to live without it, to take a hint from Hierocles, lest they die in the schooling.

But those physicians who go out without their lancet, and others who scarcely bleed a pint in a year, and those who consider every

loss of blood as a deplorable evil, do they never meet with pneumonia, pleurisy, croup, phrenitis? if they do, how do they treat them? Why, there are purging, sweating, pukes, antimony, blisters, calomel, revulsives; and then we are told that they cure pleurisy in Paris with such success by warm cataplasms, that no one dies, and they cannot get a post-obit examination.

Every one knows, and even Dr. Rush has taught most earnestly, that much inflammation will often wear itself out with perfect safety; but the great object is to cure, as Celsus says, *quickly, safely, and pleasantly*; to leave nothing behind, no inflammation to become chronic, as does a certain school of modern imposters. As to the word *quickly*, if I am not greatly mistaken this anæmatis practice must greatly prolong the cure of all severe inflammations. A bronchitis that may be cured in a few days, will be the work of a whole winter. The child that is treated for three weeks with antimony, calomel, squills, ipecacuanha, blisters, sinapisms, and bathing, is so coddled that he soon relapses, and no one can tell why, no one can say how he got a fresh cold. Then comes another course of medicine, and soon another relapse; thus the poor child is dragged on with a rattling chest, till the month of June shall have come to his relief. A physician who seldom bleeds, must confine himself to a small circle, for a large practice of dragging, relapsing patients, would allow him no time to eat or sleep.

Bleeding is generally far less detrimental to the constitution than a long disease with continued medication. Here I shall be told that there are exceptions. I do not deny it; universal rules apply only to things that can be measured or numbered. You say that scrofula is developed by bleeding; this may sometimes happen, and yet scrofulous children will suffer less from a little bleeding than from prolonged confinement and medication. Cure these children quickly, and get them into the open air to take exercise, not forgetting bark and iron. This method is better than to save their blood at the expense of a colliquation of their whole vitality by confinement.

But some one interposes the old maxim, times are changed, and we are changed with them; diseases, we don't know why, are not as inflammatory as they were when we were young. This postulate we have often heard and as often disbelieved, having seen no difference between the croups and the pleurisies of the present time and those of forty years ago.

Then a physiologist, thinking how much time it requires to perfect the new-made globuli, cries out, Have you read Marshall Hall on the loss of blood? and have you not bled your patients into a direful anæmia, or hydræmia, or at least into an oligæmia, or some undefined corruption of the blood? did their heads not ache and their hearts not throb with emptiness? was there no hyperæsthesia, no *bruit de soufflet* in their necks or chests? I answer no; that I never saw this state of the body from bleeding or from hemorrhage, except in a single case, and this was one to which I had been called in consultation. When it does follow bleeding, I therefore presume that it arises from some adventurous cause. What does it come from when no blood has been lost, when it comes *sine causa externa evidente*, as Cullen says of the gout? We must refer, says Newton, the same effects to the same causes. Now, having seen this state of body very often when no blood had been shed, I cannot consider the mere losing of blood as the cause. This state of body, then, must have its own cause, and this may be a mere accidental concomitant of bleeding.

I repeat that I have seen many people well drained of their blood by hemorrhage, by sudden bleeding and by chronic, till incipient anasarca terrified the poor doctor, and yet a restorative regimen and tonics brought them soon to a state of robust health. Has not every obstetric physician seen women who had flooded almost to death, pale, bloodless, feeble, yet continually nursing the child and recruiting their strength daily, without any of the above mentioned distressing symptoms? and has he not seen them finally restored to sound health? But you say, not every case so fortunate. I did not say every case, none but fools say this, and I am very unfriendly to this utmost grade of *numerism*, to use a fashionable word; but I do say, that health is almost the uniform result of such cases, and that I have never seen those direful consequences of letting blood, set forth by Marshall Hall and others, except in a single case, and that was soon cured by bark and iron. By the way, no physician who neglects these wonderful medicines, will ever do his duty to the patient who has lost much blood.

As to the saving of this precious fluid, much will depend on the mode of taking it away; hence I would insist, that every physician should bleed his patient himself, when a recent inflammation is to be subdued. I had a specimen of the contrary practice in my own person attacked by pleurisy, and I have not forgotten what I suffered

by it, though forty-seven years have since passed away. He was a young doctor, employed through charity and not choice ; what do you think of this man's sending eight squares to a bleeder who might not be found at home ? He should have instantly bled his patient almost to fainting, which would probably have brought on both puking and sweating. Then he should have waited half an hour, and if the pulse rose he should have repeated the bleeding. Then he should have taken from his pocket-book a paper of tartar emetic and ordered a minute dose every half hour to prevent the rise of inflammatory excitement during his absence. Now think on what is gained by this summary method. The patient is effectually bled and the disease is now broken ; then the sending for the bleeder and the medicine, with the expense of both, are saved to the patient, the doctor not charging, of course, for such accommodations. But as a compensation far greater than money, he has the pleasure of leaving his patient improving every minute, while the mere prescriber leaves him getting worse and worse. 'Tis true, the man who thus does his duty, may get a bad name, he may be called a rash and tremendous bleeder, and all the *Porcupines* in the neighborhood may pierce him with their quills ; while the prescriber of twelve ounces daily for a week, will be received among the safe travelers in the "middle way." I would rather compare him to a man riding on the railroad for his life, yet afraid to go more than five miles an hour.

I have said above, that as to saving blood, much will depend on the mode of taking it away. If the patient in a recent inflammation is effectually bled once, twice, or thrice, and the arterial action kept down at the same time by tartar emetic, enemata, laxatives, diluents, and perspiration, or by cold, as the case may require, he not only gets well sooner, but he loses less blood than when this fluid is drawn off by those little portions which make no decided impression.

A physician ought to bleed often, so as to become dexterous in the work. "Bloodletting," says B. Bell, vol. iii. ch. 8, "whether we consider it as to its influence on the system, or with respect to the nicety with which it ought to be performed, is perhaps one of the most important operations in surgery. * * * Every other I have frequently seen well performed ; but I have seldom seen bloodletting with the lancet correctly done. When properly performed, it is a neat operation ; but when not done with exactness, it is the very re-

verse." To this I am sorry to add that I have seen eminent physicians go about this work as though they had never seen it. Some such spectacle as this, no doubt it was, that led Dr. Physick to question his class through every successive step of the operation; nothing did he omit, except the necessity of learning to use either hand.

It was the want of practice, no doubt that led that eminent writer and practitioner, Dr. Charles West, to say that, "in children under eighteen months, bleeding from the arm is seldom practicable, and unless the case be urgent, it is not expedient to open the jugular." Dr. John Darwell errs in the same way. He says: "In children under two years old, it does not often happen that depletion can be performed in any other way than by leeches; occasionally, however, it is possible to open the jugular vein."

I do not believe that in the whole round of medical literature, two pages can be found that convey so much false and injurious doctrine. Let the young physician be on his guard against these errors of two excellent practitioners and writers. He will seldom find it difficult to bleed from the arm of children of any age; and so far from its being inexpedient to open a jugular vein, let him know that it will often be his bounden duty, and that he will always find the operation both easy and safe.

ART. II.—*Memoir upon Typhoid Fever and Typhoidism.* By J. B. CAYOL, Formerly Professor of Clinical Medicine to the Faculty of Paris, Member of many Learned Societies at Home and Abroad, etc. Translated from the *Revue Medicale*.

Continued from p. 243.

I return now to the grand discovery of the *plagues elliptiques*, which it is full time to examine, and to reduce to its proper value.

In this discovery there are two things to examine: the anatomical fact and the medical induction.

1. *The Anatomical Fact.* Since autopsies have been made carefully, and especially since late theories have called the attention of pathologists to the intestinal canal, nothing is more common than to find more or less numerous ulcerations of different sizes in the bowels: they are some times superficial, and sometimes deep enough to cause perforation of the bowel, a melancholy accident, always followed by

fatal peritonitis, which is fortunately very rare. These ulcerations may affect the isolated mucous crypts of Brunner, and the agminated follicles of Peyer, as well as other portions of the mucous membrane. They are found not only in subjects dead from acute diseases, but also in those who have succumbed to chronic effects, particularly phthisis. These ulcerations depend upon various causes, which I need not now consider. Some appear to be primary; others are evidently the result of intestinal exanthemata. They are generally cured easily, where the causes which produced them no longer subsist; at least we must judge so from the cicatrices we find in the bowels taken in connection with pathological facts.

All this was public property. Now here is the NEW FACT, in all its immensity.

M. Louis appears, book in hand, and says:

“Observe closely these mucous crypts, these glands, which in their normal state are almost imperceptible, which are usually called glands of Peyer, and which I habitually denominate *plaques elliptiques de l'intestin grêle*. These infinitely minute organs, which, notwithstanding their agglomeration, have so long remained unperceived, and to which anatomists were at a loss to attribute any function except the secretion of a little mucous, these organs are destined hereafter to play a grand rôle, nay, the first rôle in pathology. They have far greater importance, I do not say physiologically, but pathologically, than the liver, the spleen, the lungs, the encephalon itself; for I have discovered that they are the seat of all those numerous and varied diseases so fatal to the human race, so discouraging to physicians, which recur in epidemics under so many forms, which have exercised the sagacity of the greatest geniuses from Hippocrates until now—of those diseases, lastly, which have been so improperly called *primary or essential fevers*!!”

“We should not rely upon the authority of the ancients in questions relating to the locality of diseases, because these questions cannot be solved without the comparison of symptoms with lesions, and the ancients were ignorant of pathological anatomy.” And as to the moderns, all their labors hitherto have thrown no light upon the subject of fever. Pinel divided that great class of diseases into six orders, which he designated by the names of inflammatory, bilious, mucous, adynamic, malignant or ataxic fever, and adeno-nervous fever or plague. The illustrious author of the physiological doctrine considered all these fevers cases of *gastro-enteritis*.

Nevertheless, "notwithstanding the labors of Prost, of MM. Serres and Petit, of M. Bretonneau and some other contemporaneous celebrities, at the moment of the publication of my researches, physicians were far from being decided as to what was to be done with Pinel's six orders of fever. * * * * *

Now the confusion is at an end: it is ascertained that *all* the fevers enumerated by Pinel, *except the plague*, form only one and the same disease, the anatomical lesion of which consists, not in an inflammation of the stomach and intestines, but in a profound and specific lesion of the elliptical patches of the small bowels. Those who have hitherto defended the doctrine of fevers with the greatest pertinacity, have abandoned their position, and recognize, as M. Chomel has done, the exactness of the facts which I have observed, and of the conclusions which I have deduced from them.

"Recollect, therefore, that there is no longer such a thing as inflammatory fever, or bilious, or putrid or malignant fever: we have changed all that; remember that all these fevers are comprised in typhoid fever, inasmuch as they all have, as their common characteristic, a profound and specific lesion of the elliptical patches. I call this lesion specific, although it is common to all continued fevers: First, because I only admit one continued fever; and secondly, because this lesion is the only characteristic which distinguishes these from other acute diseases." For, except the alteration of the elliptical patches, all the lesions of the enteric mucous membrane observed in cases of typhoid affection, are found in individuals who have succumbed to other acute diseases: indeed, the frequency with which they are observed in the two orders of cases, presents very little difference.

Such is the anatomical fact on which the discovery of M. Louis reposes, or rather which constitutes it altogether. *A specific alteration of the elliptical patches of the small bowels*, the only characteristic of the typhoid affection, that is, of fever in general, of Pinel's six orders of fevers; in a word, of every continued fever which is not a local phlegmasia or an eruptive disease.

For the anatomical fact to be true, in the extended sense which M. Louis insists upon, it is obviously quite necessary that the alleged alteration of the glands should be found in every case of fever, from the mildest to the most malignant form, and that it should never exist in cases of local phlegmasiæ or other acute non-typhoid diseases. This is what the author pretends to have demonstrated. But argu-

ments against this pretended demonstration abound: I find more than I require, in the author's own observations.

He excepts himself, *proprio motu*, the plague, (adeno-nervous fever of Pinel,) and yet surely it is neither an acute phlegmasia nor a simple eruptive disease. He excepts yellow fever, Asiatic cholera, and the typhous fever of English writers, inasmuch as in all these diseases, which are most assuredly continued fevers of the gravest description, the glands of Peyer are in a natural condition. And he does not perceive that such considerable exceptions destroy his system! A more singular exception still is the fever of camps and jails, the true typhous, which he should naturally consider the prototype of typhoid fever; in which, however, alteration of the agminated glands are not always observed.

Again, M. Louis is forced to admit a *latent* typhoid affection, to explain those cases in which the specific alterations of Peyer's glands is observed in patients who had not exhibited any of its usual symptoms during life; and also a simulated typhoid lesion to account for other cases, in which all these symptoms were present during life, and yet the special alteration was not discoverable on dissection: forgetting that he had committed himself in another passage, by acknowledging, that "if he ever observed a case in which all the symptoms now known of typhoid fever existed, and where nevertheless the glands of Peyer were unaltered, he would not rank such a case among those of typhoid fever."

Here is a still more remarkable contradiction. After a long dissertation upon an epidemic of typhous fever, which prevailed in Philadelphia in 1833, and in which the post-mortem examinations, made with the greatest care, showed no alterations of the Peyerian or mesenteric glands, M. Louis declares, that "we cannot assign any seat to this disease, and thus far it has no anatomical characteristic, and, adds he, one feels one's self naturally led by the history of this epidemic to say with M. Valleix, that typhous fever may be really considered an essential fever. Oh! Oh! M. Louis, you admit then an essential fever! Then what becomes of your theory of elliptic patches, and of your exposition of typhoid fever?"

After so many exceptions, so many contradictions, and so many beggings of the question at issue, is it necessary that I should adduce other arguments? Shall I speak of simple inflammatory or bilious fevers cured after a few days' diet, which must notwithstanding be ranked among continued fevers, when they present none of

the symptoms of local phlegmasiæ or of eruptive diseases? Must we admit in these frequent cases, upon M. Louis' assurance, and contrary to all probability, a special alteration of the glands of Peyer?

I think that I have said enough to prove superabundantly, that the anatomical fact of M. Louis is not true in the wide and general sense in which he applies it.

2. *Medical Induction.* Now, that we know what to think of the anatomical fact, let us adopt for a moment the author's hypothesis in order to judge better of the inductions which he bases upon it. We will admit the existence of an alteration of the glands of Peyer in all continued fevers: does it necessarily follow that all these fevers, differing in their causes, symptoms, tendencies, in the accidents they are apt to produce, and especially in their curative indications, are one and the same disease? Yes, perhaps, for the mere anatomist absorbed in the examination of the dead body, and unobservant of the phenomena of the living one, but certainly not for the physician who studies diseases with a view to their treatment and cure: unless indeed, after the example of M. Louis, he wholly rejects the experience of centuries, to make *tabula rasa* of medicine, and to commence our science *ab ovo* with the dissection of the aggregated follicles of the small intestine?

What! because, in all these fevers, you suppose a lesion of the elliptic patches, do you think that inflammatory, bilious and nervous symptoms are no longer to be taken into account? Will these various symptoms represent the same condition of the organism in your eyes: will they not call your attention to one organ suffering more than another, or aid you in the choice of a remedy? Will you keep your eyes stupidly fixed upon the *plaques elliptiques*, and do nothing for fevers until you have discovered some specific for the lesion of these glands.

M. Louis does not recoil before any of these consequences of his theory: I can affirm that they are all implicitly accepted in his work; and from this you may judge of the *medical induction* of the anatomical fact already appreciated.

There is still a fourth part in the work, entitled *Treatment*, which occupies not less than 120 pages. It consists of seven chapters, which treat successively of bloodletting, of purgatives, of opium, of tonics, of blisters, and of ice applied to the head. On each of these remedies, we have new arithmetical data and nothing more. A given number of patients have been bled; so many have been

purged; a third set have been treated with opium, and so on. We are told how many recovered, how many died under each mode of treatment: among the latter, what patients died the 10th, on the 15th, or the 20th day; and among the former, what were the mild and what were the malignant cases.

All this suggests the idea rather of a chemist operating upon a portion of intestine in a retort with a variety of re-agents, than of a physician giving the results of his clinical observation. The result is, that according to his taste one may treat the *plaques elliptiques*, otherwise called *typhoid affection*, by bloodletting or by purgatives, with almost equal chances of success. M. Boulland's bleeding *coup sur coup* does not reach a high mark on M. Louis' numerical scale: as to other medications, arithmetic has not yet decided anything very positive as to their degree of utility. We must wait for fresh figures and new calculations.

If then, the anatomical fact upon which this whole work is based, is untrue in the general sense the author attributes to it; if on the other hand the inductions upon this fact lead only to absurd conclusions, what then becomes of typhoid fever? Nothing, absolutely nothing, as far as practical medicine is concerned, but a senseless phrase no better than the *peccant humor* of olden times, which should be excluded from medical language, as perpetuating a deplorable confusion of ideas. As for pathological anatomy, there remains a mass of facts, collected with minute exactitude, awaiting a better system of coördination and interpretation.

The *Recherches sur la fièvre typhoïde* may be cited as a curiosity of a new sort, which unfortunately is prodigiously tiresome. It is a work without thought or judgment, because the author wished to make it so. Adopting as his motto the sentiment of a celebrated sophist, he believes that he is bound to abnegate his intellect, and to accept passively, as demonstrated truths, the results of a bad system of statistics, even when these results are diametrically opposed to the most vulgar facts.

Do you wish examples? I shall have little difficulty in choosing them. Forget not that continued fever or the typhoid affection comprises all those fevers which you and I have called inflammatory, bilious, nervous, etc., and listen to these aphorisms of numerical medicine.

"Continued fever (the typhoid affection) is never observed in persons beyond the age of forty years."

"It attacks a person only once during life. * * *

Immunity is acquired by a previous attack."

"It is never of shorter duration than 14 days."

"It is contagious, at least in the provinces."

My pen falls from my hand when I have to transcribe such matter, and there is not a little of it in the book of which I am now speaking!

If this book was the work of an obscure author without authority, it would not merit the honors of serious criticism. But the author is physician to Hôtel-Dieu of Paris, and physician in chief of epidemics for the department of the Seine. His work, imposing from its size, and its grave and scientific form, is recognized by the professors of the faculty as a model! They wish to make it a classic; and yet (I say it with sincere and profound conviction) I know of no more dangerous work for young physicians, of none more calculated to paralyze their intellects, to falsify all their ideas, to lead them egregiously astray, and to conduct them to the antipodes of the true point of view for medical observation.

In conclusion, this work may be considered as the last expedient, the last doctrinal shift of the anatomical or materialist school. Under this aspect also the *Revue Médicale* was bound to examine it. This duty has been too long deferred; I thank you for having reminded me of it.

Accept etc.

CAYOL."

Some time after the publication of this letter, Dr. Sandras read to the medical society of Paris a long memoir with the following title: *Reflections upon the Cases of Typhoid Fever observed at Hotel-Dieu (annexe.)* I could not desire anything more opportune than the essay of this distinguished physician, to justify my assertion, that the unfortunate name of typhoid fever, applied to continued fevers indiscriminately, only characterizes the confusion of ideas and the want of medical doctrine. If any of my readers doubt this, let them read the conscientious work of M. Sandras; they will see how a man of science and talent, once involved in a false system, continually sees the truth through the barriers which prevent him from attaining it. In his reflections upon the present constitution of diseases, M. Sandras regrets *those enlarged views of the father of medicine*, which are now no longer regarded, and he feels himself attracted to the side of the Hippocratic or traditional school. Why does he resist this impulse? Has he good reasons for doing so?

He does not say, and his silence recalls the naïve avowal of the poet: *Video meliora, proboque, deteriora sequor*. Behold him thus fallen from the heights of Hippocratism into the bottomless abyss of typhoidism! But he is beset with new perplexities. Having described all the symptoms of the disease, and all the organic alterations revealed by dissection, he naturally asks (page 65) *what typhoid fever is, and whether it is really a special disease?* He vainly seeks its specific character in its symptoms and progress; he seeks it with equal want of success, in the cadaveric lesions; for he is obliged to confess that, *even in an anatomical point of view, the disease is far from being always identical*. Finally he declares with admirable frankness, that *everything justifies us in doubting the specific nature of typhoid disease*. You imagine after this that the author will abandon the system of typhoid fever? Not at all; he clings to it closer than ever. And why? *Because he says, amid all these doubts, I feel myself to be entirely a man of our day and epoch.* *

* * Oh, indeed! if it is necessary, in order to be a man of our day and epoch, to sacrifice one's reason, and render allegiance to systems which are false in theory and dangerous in practice, I avow for my own part, I should prefer to belong to another century and another epoch. But this is a matter of taste. It suffices me to show by this example, how powerful in our schools is still the influence of rationalist and materialist prejudices, since men of learning and experience are unable to disenthral themselves from it.

It is time to make way with the shapeless remains of the materialist school which still encumber the field of medical observation. It is time to hand over the pretended science to the incorruptible judgment of common sense, and it suffices to translate it into common language to make its absurdity manifest to the simplest intellect.

There is scarcely a person in the world who has not had in his life an attack of fever, or at least a febrile movement. This is all that is required to understand what I am about to say.

We wish to know what fever is. Let us first lay down some facts taught by common sense or by our consciousness.

1. Every one knows from his own experience, that a multitude of external causes affect us each moment of our lives: cold and heat, and sudden transitions from one to the other, the dryness, humidity and electric condition of the atmosphere, fœtid and deleterious exhalations, and all sorts of physical and moral influences, etc. etc.

2. Every one feels that we possess a power of resistance, and that this resistance is *active*, that is *vital*, and not passive and inert like the resistance of the stone to the hammer.

An active resistance is a reaction ; it is impossible to give it any other name. Active resistance and reaction are perfectly synonymous.

Hence the living body opposes an active resistance to whatever affects it ; in other words, it reacts against these things.

3. Every one *feels* that vital resistance has very variable limits ; that not only is it of unequal power in different individuals, but that it is stronger or weaker in the same individual, according to circumstances. The most ignorant person is perfectly aware that he is better able to resist heat and cold, and all the vicissitudes of the season, after he has breakfasted well than when he is hungry ; when he is gay than when he is sad.

As long as the living body is affected only in a degree proportionate to its powers of resistance, there is normal reaction, and the health is not disturbed. But if the causes which influence it act with an intensity greater than the normal power of resistance, there is an abnormal reaction, that is to say, disease. A man is walking when the temperature is at 40 deg. ; suddenly the cold becomes still more intense, and the man is taken with fever. There is at first a shivering, which characterizes the momentary depression of the vital powers, and then a burning heat, with all the accompanying phenomena of violent reaction.

Such are the primary and elementary facts revealed by medical observation ; I arrange them in the following propositions, which lead logically to a definition of fever :

Every living body is endowed during a certain period, with the faculty of providing for its own preservation, of opposing by active resistance all destructive agents, and of incessantly repairing its losses.

This faculty, peculiar and inherent in organized bodies, is the result of a peculiar force presiding over all the phenomena of life, which we name consequently, *vital force*. But as this force is manifested only by the action of organs, whenever we consider it in a state of activity, we call it *the organism*.

Life, considered in its material phenomena alone, consists in a struggle or reaction of the organism against all the injurious influ-

ences of the exterior world, which ceaselessly affect it, and tend to alter its condition.

Independently of this continual struggle or reaction of the organism, which does not disturb the harmony of its functions, accidental or abnormal reactions are provoked by all accidental disturbing causes, by all the causes of disease.

Every disease then is an accidental reaction of the organism against an accidental disturbing cause.

The intensity and the kind of reaction vary according to an infinitude of circumstances relating to the nature of the morbid cause, to idiosyncrasies, and to external influences.

When the reaction is acute, that is prompt, violent, accompanied by an exaltation of the animal heat and of the sensibility, it takes the name of fever: therefore,

Fever is a general reaction of the organism, accompanied with exaltation of the animal heat, and of the sensibility.

The good sense of the simplest peasant suffices to comprehend this definition of fever. One conceives and *feels* that fever is a vital act, an act provoked by some cause, that is a *reaction*: this is one of those intuitive truths which exclude all demonstration.

Ah well! intellects paralyzed by materialist views are incapable of apprehending such simple truths. An *act*, a *power* are not material things, and are consequently quite inappreciable to these intellects.

What is *vital force* or *life*? for these two expressions signify the same thing. The reply of the vitalist or spiritualist physician is plain: vital force is a law of creation, the law of organized beings, just as the law of gravitation is the law of inert and inorganic matter.

The question is more embarrassing for the materialist; he knows not what life is, he only hopes to do so some day. Imbued with the false belief that the reason of its existence, and the rules which govern it, are inherent in matter itself, and that by analyzing matter they will learn its secret, he hopes to discover in the texture of our organs, and their molecular alterations, the cause of vital movements in health and disease. Vain hope! the most subtle and laborious researches upon organized matter reveal nothing of the *wherefore* of life, just as the most pertinacious study of inorganic matter leaves us in complete ignorance of the cause of gravitation.

When we have subjected the cadaver to every mode of explora-

tion, dissection and analysis, we are well acquainted with the organs or instruments of the different functions of life, and the material conditions requisite for the proper exercise of these functions ; we have before us all the parts of which the animal machine is composed, but we know nothing of the motive power of that admirable mechanism ; if we endeavor by the same methods, to learn the proximate causes of diseases, we shall only by post-mortem examinations, discover their effects.

We are then forced to admit that both organic and inorganic matter are subjected to laws, which are not inherent in them, and the cause of which must always be hidden, unless, following the example of illustrious geniuses like Pascal and Newton, we look to an intelligent first cause, that is a creative Deity and Supreme Legislator. This is applicable not only to medical science, but to all science. The aim of science is to point out the laws of the universe ; it does not attempt to account for these laws.

The philosopher Montaigne has said with deep meaning that we know *the why* of nothing (*le pourquoi de rien.*)

Every physical or natural science possesses two orders of facts : the one *material*, which we discover by the senses, and which concern beings considered in themselves ; the other *intellectual*, which we perceive with the eyes of the understanding only, and which express the relations of beings, or in other terms, the laws of nature. The true philosopher appreciates and coördinates these two orders of facts without ever confounding them ; whilst materialist philosophism misunderstands the intellectual facts and arbitrarily subordinates them to material facts ; like the traveler, who wishing to learn the constitution and laws of a country, studies about its productions and topography with minute attention.

These explanations were necessary in order to explain the respective positions of the materialist school and of our Hippocratic vitalism.

We have seen the materialists, instead of accepting the *vital force* as the primordial law of organization, wish not to take it into account until it has been explained by cadaveric researches.

From the same materialist prejudice, they seek the seat of fever in the dead body.

This word *seat* implies something palpable. Thus a wound, a tumor, or an eruption, has its seat on this or that portion of the body.

But how a fever, which is an *action* of the organism, a provoked action, that is a *reaction*, how can it have a seat?

An act of the living organism is always a function, either normal or abnormal, which necessarily implies the existence of organs or instruments but not of a *seat*. To speak correctly, we should inquire not for the seat of a fever, but for its instruments or agents. The question thus proposed, the answer is very simple; it results naturally from the foregoing principles. Fever (general reaction of the organism) has as its own agents or instruments the heart and the nervous centres. His own consciousness will teach any one who has a fever the truth of this proposition.

Therefore, to seek in the dead body the seat of fever, which is a purely vital act, is to act in direct opposition to common sense, and to adopt an hypothesis of sovereign absurdity.

From this absurd hypothesis have arisen the last two systems of localization of fever: *Broussaisism*, which located fever in the gastro-intestinal mucous membrane, and *typhoidism*, which established its seat in the glands of Peyer.

By recalling the starting point of these two systems, their falsity and inanity are shown so clearly as to bring upon them the condemnation of the public.

Were it necessary to establish a comparison between the two, I should say that *Broussaisism*, though equally false, was much more useful and practical in its applications than typhoidism. In considering fever as an irritation of the gastro-intestinal mucous membrane, Broussais evidently mistook the effect for the cause, but he at least fixed his attention upon effects, which are not without importance and therapeutical value; whilst the *alteration of the elliptic patches of the small intestine*, upon which typhoidism is based, is a fact in pathological anatomy which is utterly worthless, so far as practical medicine is concerned.

Broussaisism was at least a system of medicine; typhoidism is not.

What then is typhoidism upon ultimate analysis? It is, if I may be allowed the expression, the Extinguisher of medicine.

It will be seen from what precedes, that the materialist school has only made retrograde progress since the time of Broussais, and that it is now at its wit's end. I do not think that enough life remains in it to invent, after typhoidism, any new system of localization of fever.

This said, *let the dead bury their dead*, according to the energetic

expression of Scripture, and let us return to the study of life, which should always be the principal object of medical science.

To define fever, as we have done, *a general re-action of the organism with exaltation of the sensibility and animal heat*, is to turn the back upon the corpse and look upon the living body, reacting, according to the laws of its nature, upon the external things which affect it.

These influences are exceedingly numerous and various. They comprise not only the heat and cold, the vicissitudes of seasons, and all physical and moral agencies which cause fever, but also deleterious principles which enter by absorption into the intimate structure of organs, circulate with the blood and vitiate it, and equally induce a general reaction of the organism; such are marsh and nosocomial miasms, putrid exhalations, viruses, poisons, contagions, and the unknown causes of epidemics. Lastly, all primarily local internal diseases, and all external surgical diseases, may likewise become causes of fever.

By considering the number and diversity of the causes of fever, guided by common sense alone, we comprehend in the first place, that all these causes do not affect the organism in the same manner nor in the same degree, and that the reactions which they produce should present many varieties in their character and degree of intensity. Here already a subject for serious study presents itself to the vitalist physician, which is altogether practical; we are already far from the barren domain of typhoidism, and the elliptic patches of the small bowels.

But this is not all: fever, which both in principle and in its tendencies is a conservative effort of nature, is nevertheless a disease in itself, since it is an abnormal reaction of the organism.

Common sense, to which I continue to address myself, can follow me in a few farther explanations.

We already know that the agents or instruments of fever are the heart and nervous centres, that is, the organic apparatus, which are the most general, and upon which all the others depend.

The action of these organic systems cannot be exalted without disturbance of the organism.

In the first place, an acceleration of the circulation, carried to a certain degree, cannot continue for any length of time without producing numerous causes of disorder.

The experiments of Duhamel and Chaussier, and many other physiologists, have demonstrated that the composition of the blood

is modified, and that that fluid acquires irritant properties by the simple fact of an acceleration in the circulation. This alteration of the blood produces, as a necessary consequence, an alteration of the fluids secreted, such as the bile, the gastric and pancreatic juices, etc.: these vitiated secretions furnish heterogeneous products, which are more or less deleterious, and the elimination or assimilation of which necessitates new efforts of the organism, superadded to the primary re-action.

Another important effect of the febrile turgescence and acceleration of the circulation, consists in the increased and abnormal impulsion of the blood in all the organs. This impulsion may be so great that each part of the body will receive, in a given time, five or six times more blood than is supplied to it in a state of health; hence arise congestions and consecutive local inflammations, which so often complicate fever, and which affect particular organs according to individual idiosyncrasies or exterior circumstances.

Therefore, whatever may have been the cause of fever, even though it may have been aroused by a prick of the finger or any other external and accidental cause, if the patient is laboring under cerebral excitement, he has a chance of an inflammation of the brain. If his chest is irritable or delicate, a protraction of the febrile movement exposes him more particularly to inflammatory congestions of the chest, to pneumonia, pleurisy or catarrh. If his bowels are disordered by a too stimulating diet, or by former disease, fever will determine in his case partial or general inflammation of the gastro-intestinal mucous membrane, or inflammatory congestions in the parenchymatous viscera.

These examples are sufficient to give an idea of all the disorders which may be induced by a febrile acceleration of the circulation.

The abnormal re-action of the nervous centres, which always plays a more or less important part in the general re-action of the organism, is also in itself a cause of grave complications. The varied disorders of innervation that are observed in the course of continued fever, manifested by all the shades of delirium, convulsions and paralysis, and by innumerable anomalies of function, may impress on these fevers a malignant or ataxic character which may baffle the most skillful physician.

Every one can see that these are not arbitrary deductions, and that they flow naturally from the principles already established.

The conclusion is that every continued fever is incessantly aggravated and complicated by its own effects, particularly if it is prolonged beyond seven or eight days.

Therefore, in the early stage of a fever the physician should always judge of its grade, tendencies and character, in order to decide, in the first place, whether to interfere or not; for this is always the first question which the practical physician should ask himself.

If the fever is mild, and there is nothing either in external influences or in the constitution or antecedents of the patient, which render unfavorable complications probable, then there is reason to hope that the fever will cease of its own accord. In such a case, a wise and enlightened practitioner will abstain from all active treatment; he will confine himself to watching the course of the fever or to insisting upon repose, diet, diluent drinks, proper ventilation, etc.

If, on the contrary, the fever is intense, if the patient labors under predisposition to disease, especially if the fever has some analogy with some serious prevalent disease, there is no longer any doubt as to the propriety of interference; it is necessary to arrest at once, or at any rate to moderate, the progress of the fever.

Here the insufficiency, or rather the complete nullity of the materialist system for the treatment of fevers, appears in the most glaring light.

When it is necessary to choose a medication calculated to arrest the progress of a fever, it is of very little moment whether there is alteration of the glands of Peyer or not. For these local lesions, when they exist, are not the causes but the effects of fever. And even did they precede the fever, nothing could be inferred from that fact as to the treatment.

Bloodletting, purgatives, opium and quinia are the four remedies which are justly called heroic, and upon which the therapeutics of fever is based. If we reflect upon the effects of each of these remedies, we shall admit unhesitatingly that they affect, not local lesions, but general dispositions of the organism, upon which local affections depend.

Although the general re-action of the organism (or fever) has the two most general systems of the economy as its agents, observation teaches us that these two systems have not always an equal part in the general re-action.

In a continued fever, when an attentive examination, not only of the symptoms present, but of all the circumstances of the disease, of the patient's constitution, and of the character of prevalent affections, has demonstrated that the re-action of the circulatory system is predominant, we call the fever inflammatory, and we treat it by bloodletting, whatever may be the local affections which complicate it.

When we recognize, from the same data, that the nervous system is chiefly interested in the re-action, we denominate the fever *nervous*, *malignant* or *atatic*, according to its degree of intensity, and we treat it by opium, or its succedanea, if it is continued, or by quinia if it is intermittent or remittent; or else, according to circumstances, by a combination of these two remedies with others calculated to affect the nervous system, such as baths, cold affusions, ice, etc.

Besides the nervous and circulatory systems, other less important organic apparatus may sometimes be so greatly involved in the febrile re-action as to deserve to characterize or give a name to the fever. This is the reason why fevers in which the most essential character is an abnormal secretion of the bile, are called *bilious*, and why others characterized by an abnormal secretion of the mucous crypts or follicles of the bowels, are denominated mucous: these names being the more readily adopted, inasmuch as they indicate the principal plan of treatment.

Calling a fever *inflammatory*, *nervous*, *bilious* or *mucous*, is not equivalent to asserting that nothing is to be done but to bleed, to purge, to give opium or quinia from the beginning to the end. The vitalist physician is not, like the empiric, the slave of routine. He knows that fever is a vital act, modified every moment by a thousand circumstances, and he always holds himself in readiness to fulfill the indications which present themselves. An example will make my meaning more clearly understood.

Suppose a well-characterized intense bilious fever. Whether the causes, symptoms, or the succession of pathological phenomena are examined, the conclusion is the same, viz: that the true origin or starting point of the fever was an affection of the liver, giving rise to an abnormal secretion of bile. This abnormal bile, (abnormal either in quantity or quality, or in both respects,) poured into the intestinal canal, has provoked a more or less energetic re-action on the part of that organ. Now, what is to be done to effect a cure? If we interrogate nature, she will reply by placing before our eyes

fevers of this same kind which terminate spontaneously by bilious vomiting and dejections of the same nature. These vomitings and dejections are not the disease, then, but an effect of the re-action. This re-action will cease, it appears, when it has no longer an object, when it has eliminated the irritant liquids, or the morbid principles. We second nature, therefore, by assisting these efforts at re-action by emetics and purgatives, whereby they are insufficient to operate the elimination of the morbid cause.

When, on the contrary, these efforts at reaction are excessive, and threaten to become injurious, we are careful not to excite them, and act in quite a different manner. In such a case, although we may have named the disease *bilious fever*, we do not hesitate to bleed generally or locally, according as we find reaction of the heart, or simply of the vascular system of some one organ, and we modify our first diagnosis, and style the disease *inflammatory bilious fever*. Or else, if there is excessive reaction of the nervous system, as in cholera morbus, we use opium, or some analogous remedy, and denominate the affection *nervous bilious fever*.

The diagnosis of the vitalist is not as inflexible as that of the typhoidian physician ; on the contrary, it is as varying, as pliant, as changing, as the vital acts it is intended to characterize.

As to the local affections which may complicate these fevers, we do not fail to consider them, both with reference to the prognosis and to the treatment ; and in this respect we have a great advantage over the ancients, on account of the light which pathological anatomy and new modes of exploration have thrown on this subject.

In the four varieties of fever which I have just enumerated, there is almost always excessive reaction.

There are others in which reaction is disproportioned to the gravity of the deleterious principles which affect the organism : such are the putrid or adynamic fevers, including the typhous of camps and jails, and the adeno-nervous fever, or plague.

I shall not enter into any detail in regard to these two orders of fever. I only enumerate them here, in order to complete the six orders of fever of PINEL, and to glorify the memory of that great physician, that illustrious nosographer, whose European renown shed such brilliant lustre upon French medicine at the commencement of the present century.

Pinel's classification of fevers, the result of long experience and profound study, was founded upon a learned analysis of the obser-

vations of the greatest *epidemiologist* physicians of every age. It is philosophical and practical at the same time.

When we reflect that this lofty medical conception has been excluded without any motive, and contrary to all reason, from the present system of instruction ; and that the stupid system of typhoidism is substituted for this work of genius, we can scarcely comprehend such strange aberrations in men's minds.

Happily false systems pass away, and truth has its unalienable rights. As long as there exist physicians who devote themselves to the treatment and cure of disease, there will be inflammatory, nervous, bilious, mucous, putrid or adynamic, and pestilential fevers.

It must not be supposed, however, that these names are the only ones which the practitioner may adopt to characterize fevers which come under his observation.

A variety of circumstances may serve to denominate and characterize a fever. Sometimes there is a specific cause, which will recall better than any other circumstance, the nature of the disease, and the appropriate treatment (*miasmatic fever, nosocomial, worm fever, etc.*) Sometimes this is indicated by the progress and tendencies of the fever (*preñicious fever ;*) at other times by the predominance of one or several symptoms which connect the fever with some other, the character of which is well determined, the type of which has been furnished by some epidemic (*comatose fever, choleric petechial, and miliary fever, etc.*) Lastly, the local affections which complicate a fever, may have sufficient importance to give it a name ; *e. g., cerebral fever, erysipelatous, arthritic, and catarrhal fevers, etc.*

It is by this extensive system of naming fevers, that we re-unite the chain of tradition, and re-open to youth the ancient books which materialist systems have completely closed to it. At the same time, we do not neglect to profit by the labors of our cotemporaries, by all the discoveries, all the anatomical, physical and chemical facts which modern science has revealed ; but we make these facts subordinate to the observation of the laws of life, the only true foundation of the science of man, and of the medical art.

Such is the way of progress for practical medicine. It is the path which the *Revue Médicale* has always trodden, fortified by the approbation of all sensible and experienced men who have followed the progress of science without becoming involved with the systems of the day.

The time has come for all independent physicians to break openly with these false systems, and to rally around the standard of Hippocratic or traditional medicine. This is the only way in which the mortality of acute affections, a mortality which becomes more frightful every day, can be abated.

Typhoidism has felt the need of modifying itself for some time, but in form only, not in reality, and not with much benefit to the patients. It has been compelled to recognize the absurdity of considering as one and the same disease, fevers different not only in their characteristic physiognomy, but also in their causes, symptoms and curative indications. Unwilling, however, to contradict itself too bluntly, it has devised the plan of presenting the fundamental characters of the different orders of fever as simple varieties of form. Therefore we now hear of typhoid fever of inflammatory, bilious or adynamic form.

A single reflection will suffice to place this false conversion to vitalist doctrines in its true light. If these differences, which are so well marked, and so important as regards the treatment of fevers, are only forms or appearances, what then is the foundation or basis of these various forms? It is *typhism*. Very well. And typhism, what is that? For the pure typhodian, it is the alteration of the elliptic patches of the small intestine. We know already the value of this anatomical fact. According to other typhodians, who pretend to be progressive, typhism consists in the whitish or opaline caseous exudation of the gums, the violet or indigo hue of leech-bites. I shall not stop to discuss this singular definition of *typhism*. I will only say that this appearance of the gums and of leech-bites do not exist in all inflammatory or bilious fevers by any means. When, therefore, these signs of typhism are wanting, how are these fevers to be denominated? Let us stop here; there is no longer any ground for discussion.

As it is natural enough that more importance should be attached to the *thing* than to the form, it is easy to conceive that typhodians, even the most enlightened, are not yet prepared for the treatment of fevers.

Let us hope that the form will end by carrying the thing with it, and that we shall witness the destruction of this wretched typhoidism which every day sacrifices so many victims.

Must we say what, alas! will retard this conversation? It is the existence of a large number of ponderous volumes which garnish

the shelves of the library, and which their owners dislike to send to the grocers.

Who does not recall, in this connection, the ingenious conversation of Gil Blas with Dr. Sangrado who was *a medical celebrity of the epoch at Valladolid*?

GIL BLAS.—Sir, I call Heaven to witness that I follow your method exactly. Notwithstanding, all my patients go to the other world: one would think that they took pleasure in dying in order to bring discredit upon our practice. I have encountered two to-day that they were carrying to the grave.

THE DOCTOR.—My child, I could tell you almost the same thing: I have not often the satisfaction of curing the persons who fall into my hands; and if I were not as sure of my principles as I am, I should believe my remedies were unadapted to nearly all of the diseases which I treat.

GIL BLAS.—If you will take my advice, sir, we will change our practice. Let us give, by way of experiment, chemical preparations to our patients; the worst that can come of it will be that they will produce the same effect as our bleeding and warm water.

THE DOCTOR.—I would willingly make this trial if it were not for the inferences that might be drawn from it; but I have published a book, in which I vaunt the effects of frequent blood-letting and of drinks. Do you wish that I should cry down my own work?

Va. Med. and Surg. Journal.

PART THIRD.

BIBLIOGRAPHICAL NOTICES AND REVIEWS.

A Text Book of Anatomy, a Guide in Dissections, for the use of Students of Medicine and Dental Surgery.—By WASHINGTON R. HANDY, M. D., Professor of Anatomy and Physiology in the Baltimore College of Dental Surgery, &c., &c., with two hundred and sixty-four illustrations. Philadelphia: Lindsey and Blackiston, 1854. 8 vo. pp. 810. (For sale by Randall, Aston and Long.)

Another work has made its appearance as a text-book on Anatomy. The author, however, states that it is designed to fill up a

space not hitherto occupied. It is arranged for the convenience of Students and Practitioners of *Dental Surgery*, and as such, we should suppose, from a notice of its contents, that it is well calculated to bring about the object contemplated by the author.

Dental Surgery has grown into a degree of importance that makes it necessary, on the part of those engaged in its practice, to cultivate not only a knowledge of the Anatomy of the mouth, but also a knowledge of the Anatomy and Physiology of the entire system. At such objects the book before us aims, and as a consequence is entitled to attention.

Anatomy has been, and is now, studied too little by general practitioners, and also those engaged in specialities. It lies at the foundation of three-fourths of all the knowledge that is available in both Medical and Surgical practice. The Physician who undertakes to practice Medicine without a knowledge of Anatomy, will find very much in regard to Physiological and Pathological processes that he cannot understand any more than a blind man can colors.

The Practice of Surgery.—By JAMES MILLER, F. R. S. E., F. R. C. S. E., Surgeon in Ordinary to the Queen of Scotland, Surgeon in Ordinary to His Royal Majesty, Prince Albert, for Scotland, Professor of Surgery in the University of Edinburgh, &c., &c. Third American, from the second Edinburgh Edition. Edited with additions by G. W. SARGEANT, M. D., one of the Surgeons to Wills Hospital. Illustrated by three hundred and nineteen engravings, on wood. Philadelphia: Blanchard and Lea, 1853. (For sale by Randall, Aston and Long.)

The reputation of this work is such that it needs no recommendation at the hands of any one. As its name imports, it is a practical treatise on one of the most attractive departments of the "healing art," and few men of ancient or modern times have succeeded so well in bringing within a small compass, so much that is essential to the practice of the science.

"The Editor has endeavored, so far as he was able, to supply any omissions which the author may have accidentally made, and has suggested such amendments as appeared advisable."

A very large number of wood-cuts have been introduced into the re-print, chiefly to illustrate objects described but not figured by the author.

This volume, *The Practice of Surgery*, taken in connection with *The Principles*, by the same author, forms an exposition of the state of Surgery, as it exists at present, that is, perhaps, not surpassed by any other work in the English language.

The arrangement of the work is very good, and the author has succeeded in presenting that, and that alone, that is most likely to be available to the practitioner.

A Treatise on Operative Ophthalmic Surgery.—By H. HANES WALTON, Fellow of the Royal College of Surgeons in England; Surgeon to the General London Ophthalmic Hospital, and Assistant Surgeon to St. Mary's Hospital. First American, from the first London Edition, Illustrated by one hundred and sixty-nine engravings, on wood. Edited by S. Little, M. D., Author of a Manual of the diseases of the Eye; Surgeon to Wills Hospital for the eye and limb; Fellow of the College of Physicians of Philadelphia, etc. Philadelphia; Lindsey & Blakiston, 1853. (For sale by Randal, Aston & Long.) Vol. 1.

Among the new books coming through the press in such great numbers, another such as the one indicated will not be unacceptable to the many now studying the diseases to which the Eye is subject.

This work gives a faithful and learned exposition of Ophthalmic Surgery, as it is taught and practiced by the most enlightened men of the age. "It is evidently the production of a thoughtful and independent observer, thoroughly acquainted with his subject, and capable of imparting to others clearly and plainly the knowledge which he possesses.

Unlike many works on similar subjects, the reader is not perplexed in this with an array of different modes of treatment, without any statement as regards the one that is the best. The directions here are positive.

Of English origin, the work bears upon its face something of the accuracy which characterizes the ophthalmology in that country.

The present edition is creditable to the Editor and Publishers, and will make a valuable contribution to our literature on a very important subject.

A Treatise on Venereal Diseases.—By JOHN HUNTER, F. R. S., with copious additions.—By Dr. PHILLIP RICORD, Surgeon of the Hospital du Midi. Paris, etc. Edited with Notes.—By FREEMAN J. BUMSTEAD, M. D., Physician to the North Western Dispensary, New York. Philadelphia: Blanchard & Lea, 1853. (For sale by Randall, Aston & Long.)

Between the views of the immortal Hunter and Ricord on Venereal diseases, there has been a great similarity, particularly as it regards several very important points. Both authors agree that Constitutional Syphilis is properly divisible into two periods, and both regard the secondary symptoms which have by general consent acquired the name of *Hunterian*, as being non-contagious. "It is not without reason, therefore, that the names of these two distinguished authors, though separated for half a century, appear together on the title page of this volume.

In 1840 Ricord's Annotations to Hunter's Treatise on the Venereal Disease, were first published in connection with the contributions of Sir EVERARD HOME and BABINGTON. The work was received with great favor by the French, as containing a summary of the knowledge of two of the most distinguished men who have contributed to this department of medical science.

The disease, which it is the object of this work to consider, mortifying as it is to state the fact, is one of increasing frequency in our country, and as a consequence, physicians should all be prepared to give it the most enlightened system of medication.

Something may be judged of the labor of Hunter, to perfect his treatise on Venereal Disease, from the following conversation which he held on the subject with one of his friends:

"I am resolved that it shall not be a mere bookseller's job, every subsequent edition rendering the former useless. The truth of the doctrines I have proved so long as to reduce them to conviction; and in order to render language intelligible, I meet a committee of three gentlemen, (Sir Gilbert Blane, Fordyce, and Pitcarn,) to whose correction every page is submitted."

Diseases of the Eye.—By W. LAWRENCE, F. R. S., etc., etc., a new edition, edited with numerous additions, and two hundred and forty-three Illustrations.—By ISAAC HAYS, M. D., Surgeon to Wills Hospital, etc. Philadelphia: Blanchard & Lea, 1854. (For sale by Riley & Co.)

This is a volume containing 930 pages of perhaps as good doctrines and as perfect illustrations as are to be found on the subject of which it treats. It needs no commendations at our hands, for the name of the author, accompanied with that of the accomplished American editor, ISAAC HAYS, is a sufficient guarantee that the work is of no ordinary character, and that the present edition is up to the times in everything that relates to diseases of the Eye.

The present edition embraces a number of valuable additions. Among these may be noticed an account of many recent microscopical investigations into the structure and pathology of the Eye—several diseases also, not treated of in the original, and a full account of the “*catoptric examination*,” and its employment as a means of diagnosis. There may also be noticed in the way of additions, a description of recently invented instruments for illuminating the retina, and some new methods of examining the interior structure of the Eye. Taken altogether, therefore, this work deserves a place in the library of every one having anything to do in the treatment of diseases of the Eye.

Bennett on Inflammation of the Uterus,—its Cervix and Appendages, and on its connection with Uterine Disease.—Fourth American, from the third and revised London edition. Philadelphia: Blanchard & Lea, 1853. For sale by Riley & Co.

Such is the title of a work of 400 pages, on diseases of the Uterus, a subject as poorly understood as any other within the range of pathology. That every Practitioner possesses a stock of information on the subject of uterine disorders, is very true, but that he possesses accurate available knowledge, is quite another question. The anatomy and physiology of the organ are yet in a state of infancy, and so also must be the pathology. In regard to this subject the author says :

“On referring to the most authentic works on uterine diseases, both French and English, I found that the data which the former contained respecting this malady, were insufficient for the numerous modifications which I daily witnessed, where the latter were nearly completely barren on the subject. After much doubt and uncertainty, I at length arrived at views which appeared to explain much of that which had heretofore been obscure. It was not, however, un-

til the experience of one year and one hospital, had been corrected by that of other years and other hospitals, that my ideas took the direction presented in this work."

The design of the author, therefore, is to supply the profession with something that is reliable, and from our review of its contents we think there has been light thrown over many parts hitherto obscure.

The arrangement of the work is philosophical. The author begins as he should do, with a brief but accurate account of the anatomy and physiology of the organ, and thus prepares the reader in some measure to appreciate what he says on pathology.

Chemistry, Theoretical and Practical.—By GEO. FOWNES, F. R. S. etc., with additions by ROBERT BRIDGES, M. D., Professor of Chemistry in the Philadelphia College of Pharmacy. A new American from the last revised London edition. Philadelphia: Blanchard & Lea, 1853. For sale by Riley & Co.

This is a neat little volume, strictly elementary and well adapted to students for whom it was originally intended. On account of the death of the author, the revision of this edition has fallen into the hands of Dr. Bridges, who fully sustains the former reputation of the work.

Ellis's Medical Formulary.—Tenth edition, revised and much extended. By ROBERT P. THOMAS, M. D., Professor of Materia Medica in the Philadelphia College of Pharmacy. Philadelphia: Blanchard & Lea, 1854. For sale by Randall, Aston & Long.

This is one of the books, if we would judge from the number of editions through which it has passed, of real merit and usefulness. The edition before us, contains a number of improvements, on the one preceding it. Entirely the tables on the doses of medicine have been re-written. The various changes which have taken place in nomenclature during the last twenty years, have caused some discrepancy in prescribing and difficulty in compounding. To obviate these, all the formulæ embracing officinal articles, have now been brought to the standard of our National Pharmacopœa.

Condie on the Diseases of Children.—Fourth edition. Revised and Augmented. Philadelphia: Blanchard & Lea, 1853.

The edition of this work before us, contains upwards of seven hundred pages devoted to the consideration of diseases peculiar to children, or those which occur between birth and puberty.

From what the author says in the preface, he has, in this, as well as in previous editions appropriated to his use every important fact that he has found recorded in the works of others who have written on the same subject. But notwithstanding this he has relied, to make up the body of the work, chiefly on his own observations and experience, acquired through a long and extensive practice under circumstances well adapted to the study of the diseases of early life.

Hypothetical reasoning has as much as possible been avoided throughout the work, the author has, as he remarks, confined himself to a simple statement of well ascertained pathological facts and therapeutical directions—to make the work as its title imports, *A Practical Treatise on the diseases of children.* For sale by Randall, Aston & Long.

PART FOURTH.

EDITORIAL AND MISCELLANY.

DEATH OF DR. HOWARD.

Of late, we have had an uncommon mortality among medical men; and what is still more to be regretted, it has embraced an unusual portion of those who had attained to a high degree of usefulness. From foreign countries, news have come to us of the death of Bransby B. Cooper, Esq., F. R. S., of Dr. Robt. Graves, the able expositor of Practical Medicines, and Mons. Orfila, the world renowned Toxicologist. At home, we have lately had to include in our necrological notices, the names of Beaumont, Drake, Caldwell, Buckner, Saml. McClellan, Estan Cooke, and now that of Howard.

All of these eminent men have passed from the stage of action within a short period, and the different communities in which they resided, not less than the profession of which they were members, still keenly feel their loss.

Dr. Howard, the subject of our notice, died at his residence in this city, on the morning of the 16th January, in the 45th year of his age. His recent connection with this Journal as editor, and the relations he sustained to the profession of Medicine, make it proper that his death should not go unnoticed.

He was born at Andover town, Vermont, in the year 1809. At the age of 17, he was left in the care of a widowed mother. He formed the design of studying medicine while very young, and graduated at Berkshire College, in Massachusetts, when he was at the age of 22. His first location to practice medicine was made in Ohio, at Windham. He stayed in that place but a short time, when he moved to Elyria, Lorain county, Ohio, where he remained eight years. In Jan. 1844, he removed to this city, where he resided at the time of his death.

Throughout life, Dr. Howard's career has been interesting. In a letter which he dictated a short time before his death to his daughter, residing in Illinois, and in which he wished to give some account of his early struggles, he, among other things, holds something like the following language :

"I grew from the hard soil of a hill among the Green Mountains of Vermont. Nursed in the lap of poverty my growth was slow, for my energies and faculties were cramped and stunted. But as I grew in years, they became somewhat developed. No sooner, however, had I grown up among men, than the storms of life attacked me. Tempests often seemed to sever my tender frame, when my body would bend to the very ground. But as soon as the storm was over, being of an elastic nature, I sprang upright again and pushed on with redoubled energies towards the zenith of my course. The adversities that early beset my path only served to make my will more unbending, and at last, by dint of untiring perseverance, and still more by the help of Almighty God, I came up through the sea of difficulties that encompassed me and took my position among the good men in the medical profession."

Such, in general terms, is the Doctor's own description of the difficulties that surrounded his career in early life. Destitute of the means of obtaining even a common education, he states in another part of the same letter, that he was in the habit of employing himself at hard labor with an *axe* and *maul* through the day, and then taking as much of the night as he could spare from sleep for the purpose of improving his mind. By such a course he obtained an

ordinary knowledge of the most essential branches of an English education. While a medical student his fortune, it appears, was no better. Often he was compelled to suspend his studies and resort to loathsome drudgeries in order to get the means to pay expenses. His ambition, however, was to be a man, and nothing that industry or economy could surmount, was allowed to stand in his way.

During the first ten years of his existence as a Practitioner of Medicine, in the north part of this State, his business was not productive of an income sufficient to place him above want, or in a condition favorable to the cultivation of professional information. Notwithstanding this, it was during that period that he obtained much of the elementary information that gave him character and usefulness in after life.

In 1844, as previously noticed, he removed to this city and offered his services to the community in the character exclusively of a Surgeon. Possessed at the time of but a limited reputation in that department, he failed to receive business enough for a support, and as a consequence abandoned his original design and became a candidate for general practice. In this capacity his success was rapid and he soon obtained a lucrative business.

On the removal of Willoughby Medical School to this city, in 1847, Dr. Howard was appointed to the chair of Surgery, and subsequently to the same chair in Starling Medical College, a position he occupied at the time of his death. This was a place to which he ardently aspired, for it afforded a theater for the cultivation of that department upon which he designed to make the greatest effort for character. At first as a teacher, like the celebrated Wm. Hunter, he labored under timidity and solicitude, but these gradually wore off, and he acquired the faculty, in the lecture room, of expressing himself with perspicuity and often with elegance. The secret of his success, however, consisted in making himself perfectly acquainted with his subject before he came before his class; and, to accomplish this, he often expended an uncommon amount of labor on a single lecture. On this account, as well as from his tender dignified demeanor in all his surgical operations, he was listened to with great attention and respect. In Surgical pathology his judgment was very good, and as an operator he probably was among the first of the age. Of this *ultima ratio medendi*, he sometimes impressed us as being too fond. This, however, is a vulnerable point in the character

of most Surgeons. During the last year, he occupied a portion of Starling College building as an *Infirmery*. Into this he received invalids requiring medical as well as surgical services. This afforded material during the lecture term for clinical instruction, contributed very much to the attractions of the College, and afforded him a fine field for the cultivation of his favorite pursuit.

Points enough in Dr. Howard's character have now been noticed to furnish the material for a few general thoughts.

Endowed with a laudable ambition to excel, and be among the first men of the age, we find that he trusted not to wealth, for, as he states, he was nursed in the lap of poverty; nor to the influence of wealthy relations, for of these, he had none; nor to what circumstances might accidentally turn up in his favor; nor to the simple possession of fine natural abilities;—but to plodding industry—untiring application. He relied on the truth of the saying, *labor omnia vincit*.

So firmly did he believe in the potency of these elements of success that he embraced every opportunity, public and private, to impress their truth upon young men about to enter the profession. Genius with him was a phantom, as unproductive of useful results as the Deserts of Arabia are of vegetable matter. In his estimation, the difference between men is oftener the result of a difference in application, than in natural endowments. The habits of study which he adopted in early life, became intensified as he increased in years, and, as a consequence, for the two or three years preceding his death, his whole nature appeared to be absorbed in the desire to acquire knowledge, and in cultivating those branches most likely to contribute to his success as a Surgeon.

After the death of Dr. Butterfield, the deceased assumed the editorial management of this JOURNAL, and continued its publication until bad health during the past year, made it proper for him to retire. As an editor, he possessed some valuable traits. He was always courteous, and his editorials, although never elaborate, were characterized with perspicuity and force. He seemed in his selections to see what would be instructive and practical, and hence he received a patronage that placed the JOURNAL very soon upon a permanent basis. In its editorial management he enjoyed himself very much, and when disease had paralyzed his pen, and the condition of his system made it proper that his thoughts should be turned towards that eternity, into which he was compelled to entertain the

idea that he might soon be absorbed, with an aching sigh he remarked to me: I part from my connections with the JOURNAL, with feelings something like what I would do from a beloved child. When its energies were weak and crippled, I took hold of it and nursed it into existence, for the purpose of promoting the interests of the profession in the West, and of using it as the vehicle of my thoughts to my medical brethren. And now, when I am at an age the most favorable to composition, and when, without being vain in saying it, I feel that I could be of service to my day and generation,—that I could make an impression for good upon the age in which I live, the impulses of disease warn me, that, for the present, I must abridge all literary pursuits, however dear, and give attention to my body, that I feel conscious is daily becoming attenuated, by the gnawings of what is regarded as a fatal disease.

A peculiarity of Dr. HOWARD's mind was strength, rather than brilliancy or activity. In acquiring elementary information, he labored. Matter that was new and somewhat complex, he mastered only after great exertion. At nature's feet, however, he would sit patiently and perseveringly engaged in the work of interrogation until he accomplished his object. His career, although cramped in the beginning by the *res angustæ domi*, and everything that would seem to be unfavorable, was from poverty and obscurity, to a state of competency and character. What are the means by which he accomplished those results, is a question full of interest to the hundreds and thousands of young men now ready to adopt any course that will give them usefulness and position. A *Will*, a disposition to be some body seems to have been not only the *primum mobile*, but the sustaining element of success. In bringing about results, common sense measures were always employed. Believing that knowledge did not come by intuition, he acted accordingly, and hence, throughout life we see he was persevering and industrious. His particular desire was to be a Surgeon, and, as a consequence, the principal energies of his mind were directed to that end. In order to accomplish this there was no circumstance that was favorable, but what he invoked in his behalf. Indeed, he threw himself wholly into his purposes, and seemed to pass through the world to select from it what would minister to the goal of his ambition.

Adversities, as we have seen, often crossed his path, and sometimes levelled him to the dust. But when they subsided he assumed again the upright position, and went on with renewed zeal towards the

zenith of his course. All his movements were characterized with system. Order was highly developed, not only as regarded his habits of study, but in carrying out everything connected with the exercise of his professional labors.

The subject of our notice, in early life, received the instruction of Christian parents, and became theoretically and practically a Christian of some zeal. Several years since he became skeptical, and renounced his belief in some of the principal doctrines of the Christian system. During his last illness his mind retained its vigor and clearness until within forty-eight hours of his death, and, as a consequence, in view of the solemn future which he soon expected to enter and explore, he embraced the occasion to review the doctrines he had lately imbibed, and their availability in the crisis before him. After doing this his skepticism, it is said, disappeared, and he again placed his hopes of the future upon the promises of the Bible. This part of our notice may seem irrelevant, but our apology for it may be sought for in the fact, that it exhibits the movements of a mind of no ordinary character, with reference to a very serious event, and, on this account, should not be less interesting to the medical, than to the religious philosopher.

We now conclude this brief notice of our professional brother, prepared in haste, and we may add, at the same time, that we are conscious of a vacuum in our midst. The manly form which we seldom failed to meet in making our morning rounds through the city has disappeared; the hand that was formerly so industrious among us, is now paralyzed; the voice once so instructive is stilled; the *scalpel*, always so ready in the relief of suffering humanity has been placed in its case; and all that is earthly of our friend now reposes in Green Lawn Cemetery, under the dominion of forces governed by Superhuman design. *Requiescat in pace.*

CHARACTER OF THE DISEASE.

The disease which occasioned the death of Dr. Howard, was, in its commencement and progress, somewhat insidious. Several years preceding his death, his illness came on in paroxysms, and, being more or less transient, excited no alarm. Among the most conspicuous of his troubles was a periodical head-ache. Under this he labored for several years, and until within a few of the last weeks of his life. At first the paroxysms were few and of a short duration, but as his illness progressed, they become more frequent and intense.

Generally they were accompanied with very persistent vomiting and partial amaurosis. Within the past year his attention has been turned to the condition of the *urinary organs*, from the circumstance that he experienced some inconvenience in micturition, and the microscope demonstrated in his urine an uncommon proportion of *phosphates*.

Entertaining fears that the kidneys were the seat of serious disease, he was induced, during the past year, to visit several distinguished medical gentlemen for consultation. Among the number was Prof. Clark of the College of Physicians and Surgeons, New York, who detected *albumen* in the urine. After this, his urine was frequently examined and always showed the presence of this substance in greater or less abundance. On the 12th of November, last, he handed me a specimen that had been carried in a small vial in his pocket for two days previously, and desired me to examine it with the microscope. It was placed under a glass of 555 diameters and the following were the appearances:

1st, Mucous cells; 2nd, Epithelial scales; 3d, something that I regarded as detached portions of the mucous membrane lining the *tubuli uriniferi*; 4th, the ammoniaco magnesian phosphate, in small quantities; 5th, *Urinary infusoria*.*

These were detected in looking for crystals. They were very numerous and of different forms. Most of them were circular, and these had a gyratory motion. Others had a length that was several times their breadth. The long ones tapered from the head to the tail, but there seemed to be no contraction marking the connection of the head with the body. The size varied. Those that were circular, were about the 1-6000th of an inch in diameter. The oblong ones had about the same transverse diameter, but their length was about 1-500th of an inch. The circular ones traversed but a small space in the field of the instrument, while the others passed sometimes entirely across it.

Up to the period when *albumen* was discovered in the urine, but little if any change was noticed in the condition of the general system. Shortly after this, however, some emaciation became visible, the cephalalgic distress increased in duration and intensity, the amaurosis was more annoying, and the pulse increased in frequency. The state of things up to this time indicated to no one any thing

*This name is one I have thought proper to apply. I am not aware that any one has previously discovered infusoria in the urine. I have since found them in specimens from persons laboring under different diseases.

like a rapid course, when about the first of December, *double pneumonia* supervened, characterized with great dyspnœa and an almost entire inability to occupy the recumbent position. Nothing that was done for this afforded anything more than temporary relief, and, as a consequence, after enduring the most indispensible distress, he expired on the morning of the 16th January.

Post Mortem.—Both *lungs* were engorged, and portions of them more or less hepatized. The left adhered slightly at its summit. The cavities contained about 18 ounces of a brown fluid. Between the pericardium and *heart* there existed some slight adhesions, not evidently the result of recent morbid action. The walls of the left ventricle very thick, perhaps more so than natural. The *liver* was of a tawny yellow color externally, and when cut into, exhibited the same appearance, thickly interspersed with dark granules. This condition corresponded with what Laennec describes under the name *cirrhosis*, and other authors under that of *nutmeg liver*. The liver weighed 77 ounces, avordupois. No trace of disease was observed in the *brain* or its investing membranes, except an opacity of a small portion superiorly of the arachnoid, and slight subarachnoid effusion. The organ was uncommonly large, weighing 60½ ounces, and throughout was of healthy consistence. The *kidneys* were of the natural size and form. Externally the surface, after the tunic was removed, presented a motley and *tuberculated* appearance. A longitudinal section showed the color of the tubular and cortical portions to be that of a deep chocolate, from being perhaps, gorged with blood. No granules were apparent in the texture to the naked eye, nor did I succeed in observing them with the microscope. It is proper here to say that the kidneys were not injected. The infundibulum of one of them presented several patches of ecchymosis.

On the announcement of the death of Prof. HOWARD, the class of Starling Medical College held a meeting, and passed the following resolutions :

WHEREAS, it has pleased Almighty God, in his wisdom and power, to remove from our midst a beloved Teacher, Prof. R. L. HOWARD, we, the Students of Starling Medical College, in this, the expression of our feelings, do most deeply feel his loss, both as Teacher and Friend, but bow ourselves in humble submission to this mournful dispensation of *Divine Providence*. Therefore, be it *Resolved*, That in his death community have sustained an almost

irreparable loss ; that a star of the first magnitude has fallen from the galaxy of the Medical Profession ; and our institution has lost a scientific and impressive teacher, one who spared no effort to elevate it to a high place among those of similar character throughout the land.

Resolved, That the members of the present class most deeply regret the loss of one so well calculated to direct the mind in the pursuit of Medical science.

Resolved, That we sympathize with the Faculty of Starling Medical College in the loss of an able and efficient colleague.

Resolved, That the class do most truly and feelingly sympathize, and mingle their heart-felt regrets with the bereaved family and friends of the deceased, knowing that their loss stands permanent to all others, as Husband, Father and Friend.

Resolved, That the members of the class wear crape on their left arm for thirty days, as an expression of their sorrow for his loss.

Resolved, That this committee wait on the family of the deceased, and a copy of these proceedings be presented by the Secretary.

B. B. JONES, Secretary ; L. T. HEWINS, Chairman.

GOV. MEDILL'S MESSAGE.

Among the subjects brought before the Legislature by Governor Medill in his Annual Message, we find some suggestions worthy of the attention, especially of Medical men. We insert the following:

“ There is a class of persons with equally strong claims upon our sympathies, who do not seem to be embraced within the range of our beneficial operations. I allude to the *Imbecile* and *Idiotic*, of whom there is said to be a large number in the State.”

“ Idiocy and Insanity until lately were confounded, so far at least as any efforts were made for their amelioration and relief. The proper distinctions are now observed, and each class is found to be amenable to different modes of treatment.”

“ Idiocy is understood to consist in an impaired condition of the powers of the mind and an entire want of the reasoning faculties. Persons thus afflicted are not responsible for their acts and must, therefore, become a public or private charge. Possessing muscular force, some traces of memory, and the powers of imitation, they are capable of being trained to perform many of the duties of life.”

Such suggestions, brief as they are, ought to be sufficient to awaken the proper amount of inquiry into the important subject to which they relate. From information already obtained, we have, as stated by the Governor, a large number of these unfortunate beings in our State, most of them confined in Jails, Infirmaries, &c. ; and it seems to be nothing more than an act of humanity to make an effort for their amelioration. Medical men, who are always ready to move in matters of this character, should take the steps preparatory to the erection of a suitable institution.

An enterprize of the kind can no longer be regarded in the light of an experiment. Idiots, it has been proven, are capable of being trained to attend to their own personal wants, to labor in mechanics and agriculture ; and those approaching more nearly to rationality, have been taught to read and write.

Everything considered, our State needs an institution of the kind indicated, to complete her system of Benevolent Institutions. Shall not all embrace the present as the most auspicious period to put on foot the necessary measures to bring it about.

LEAVING COLLEGE.

The present is a period of the year in which students of Medicine, from one end of the Union to the other, are leaving College and returning to their preceptors for additional instruction, or taking locations for the purpose of commencing business on their own responsibility. To the latter the future is full of interest and contains both the elements of success and failure, often masked, it is true, in such a way as not, at first, to be easily recognized.

On the opening of an office, the young physician will oftener find more persons flocking in to make his acquaintance and see "what manner of man he is," than "*patients.*" Many of these will drop in, and finding no cordiality of feeling, will go their way, perhaps to return no more. Others of more patient investigating disposition, will sit around awhile, in order to see what the developments are in the young Doctor. Indeed, in turns, he will have visits from individuals representing all the different classes that happen to surround him. Among these a certain kind "*the Loafers,*" never fail to call. Progress in the arts and sciences may come to a stand, the parson

may fail to meet his appointment, the merchant may be behind time in getting on his goods, the farmer in gathering his crop, and the physician in seeing his patients,—but a regular loafer, strange as it may seem, is always up to his engagements. He moves with the regularity of a clock, and his periodical visits recur with as much certainty as do the chills of a Tertian Intermittent, and are just about as destructive to good habits as the disease just mentioned is to red-blood corpuscles.

The young physician that gives much attention to those portions of humanity, will be apt to witness a regular and progressive atrophy of his stock of knowledge. Most conspicuously this pathological process will be first observed in the anatomical information that he brought with him from college. Disintegration, decay, eremacausis, are terms that do something towards expressing the nature of the changes that will go on in that branch, of all others the most available, and without which, position in medical society is impossible. While these changes are going on, if he surveys carefully with respect to other things, he will be apt to find, that what little knowledge he has been able to obtain of chemistry while attending lectures, is gradually fading from his view. This kind of knowledge for the human mind, like carbonic acid, for many of the salifiable bases, has a weak affinity, and, as a consequence, is easily displaced.

But we have not mentioned all the interesting results derived from cultivating the acquaintance of the individuals to which we have alluded. Every physician, of course, when he first goes into business, fixes up a neat office with everything clean and in its place. Thus arranged, it, of course if he is fond of loafers, ought not disturb his equanimity to find the floor of the office covered over every morning with tobacco juice, the stumps of old cigars, and *pen-knife "whittlings."* This, however, is not all. Most of the customers of the class we are noticing, frequently, during their elaborate discussions, get tired of the *perpendicular*, and assume that of the *horizontal*, with their *pedal* extremities resting upon the stove, chairs, or wall, and thus leave appearances as indicative of their previous presence, as did the Ornithichnites, of a former period, in the Red sandstone of New Jersey. Not all is yet said. Uncovered jars, tincture bottles without stoppers, and the contents of a case of pocket instruments strewed promiscuously over the shelves of the medicine case, all inviting the play of chemical affinities, complete the array of phenomena, and fore-shadow future destiny.

Prof. Judkin's Letter.—Notwithstanding the length of this letter, it will pay perusal. The principal subject, the *use of the Perchloride of Iron in the treatment of aneurism*, is somewhat new and cannot fail to excite interest among those, who, as they live, try to make progress. Aside, however, from the merits of the interesting inquiry, there are other things about the letter that are worth noticing. We allude to the movements of the French mind, in the Academy of Medicine, the most learned body of the kind in the world, with reference to the proper methods of testing the qualities of any article proposed as a remedy for disease, and the morality of the practice of making the first experiments upon man. The courtesy and liberality exercised by the members towards each other, when differences of opinion were entertained, indicate intellectual and social cultivation of a high order.

New Books.—Since our last No. was issued, we have received an unusual number of new books. The most of these are noticed in this number of the *Journal*. Several have been delayed until our next for the reason that we wish to review them at some length. Among these we may mention :

Paget's Surgical Pathology; Lindsay & Blakeston, Publishers, Philadelphia. For sale by Randall, Aston & Long.

Buckler on Bronchitis and Pneumonia. For sale by Riley & Co.

Carpenter on the Use and Abuse of Alcoholic Liquors; Philadelphia: Blanchard & Lea. For sale by Riley & Co.

Wilde on Diseases of the Ear; Philadelphia: Lea & Blanchard. For sale by Riley & Co. This is a new work, and contains some valuable contributions to science.

Medical Students.—The present is a period somewhat prolific in the way of medical material in the *transition* state. In most of the Colleges throughout the Union, there is an increase of Students on former years. Jefferson Medical College leads off, and has 625; University of Pennsylvania, 510; Pennsylvania Medical College, 175; University of Nashville, 240; University of Maryland, 200;

College of Physicians and Surgeons, New York, 250 ; Medical Department St. Louis University, 130 ; Medical Department Missouri University, 70 ; Ohio Medical College, 91 ; Cincinnati College of Medicine and Surgery, 50 ; Miami Medical College, 50 ; Starling Medical College, Columbus, O., 95 ; Cleveland College, 150 ; Buffalo, 40. At the Louisville Schools, rumor says, the classes above an average of former years.

Braithwaite's Retrospect of Practical Medicine and Surgery. Part the twenty-eighth of this work we have received. It is published by Stringer & Townsend, 222 Broadway, New York, at two dollars per annum.

Banking's Half Yearly Abstract.—By Lindsey & Blakeston, Philadelphia, is also on our table. Price \$2 per annum.

Both of the above periodicals are for sale at our city book stores. Each one contains a large amount of matter.

American Medical Monthly.—This is another new periodical. It hails from the Faculty of the New York Medical College, and is under the special editorial supervision of EDWARD H. PARKER, M. D. Like most of the Journals of the country, it has the care of a college upon its shoulders, and the future will reveal how well it performs its duty, not only to the college but to the interests of science. At present appearances look favorable.

Charles A. Lee, M. D., versus Homœopathy.—The class of Starling Medical College, recently had a case tried before them, in which CHARLES A. LEE, M. D., was *Plaintiff*, and HOMŒOPATHY *Defendant*. The case was argued by the plaintiff *in person*, at considerable length and with great ability. Indeed everything, even to murder itself, tending to give the criminal bad character, and render him odious in the eyes of community, was charged and proved in the

argument. The defendant not appearing, by counsel or otherwise, the case went to the *Jury*. Verdict—defendant GUILTY, *but allowed to run at large!*

Drake Society.—A Society bearing this name, has been organized in this city, for the purpose of cultivating the medical and physical sciences. Its meetings are held twice every month, and so far have been interesting. The officers for the present year are,

JNO. DAWSON, M. D., *President*.

WM. R. THRALL, M. D., *Secretary*.

C. C. PARKER, M. D., *Treasurer*.

Duelling.—Two physicians have been fighting a duel in Mississippi, and one of them was killed. We once lived in an atmosphere where such was the mode of settling insults,—never knew the practice however to get any great currency among medical men. In executing the various and varied duties of physician, feelings are cultivated the tendency of which are to *save*, rather than to *destroy* life, hence perhaps, duels are rare in the medical profession.

Prof. Mott's Letter.—(The following letter from the venerable, and celebrated MOTT, shows that he is making an effort to have his name disgorged from the greedy stomach of charlatanry, into which it seems, without his knowledge or consent, it has been swallowed. We give place to the letter with great pleasure, and as a consequence, the statement of the Nov. number of the *Journal* stands corrected. —ED.)

NEW YORK, Dec. 26, 1853.

ED. OHIO MED. AND SURG. JOURNAL,

SIR:—Will you be so kind as to correct a mis-statement in the Nov. number of the *Ohio Medical and Surgical Journal*, of which you are Editor.

I never recommended Dr. Hartly as an Occulist or Curist. If he refers to me therefore, it is wholly unauthorized.

In various directions of our country, I find myself set forth in connected with Pills, Powders and Balsams, which I know as much of as I do of Dr. Hartly, as an Occulist.

I hope you will give me the pleasure of seeing your Journal more frequently hereafter.

Respectfully yours,

VALENTINE MOTT.

Typhoidism—In this No. we conclude the paper of Cayol on Typhoidism. In many respects it is an able production. The author shows not only great familiarity with the various theories that have from time to time been brought forward in explanation of febrile phenomena, but also a considerable knowledge of the essential nature of the thing itself,—that group of symptoms to which we apply the name *fever*. His criticism on the *Materialist* school of which Louis is the modern, perhaps the most eminent representative, deserves consideration. The history of the past shows quite a diversity of opinion, and we can see about as much propriety in the views of Pringle, Marcus and Clutterbuck, who regarded the pathology of fever as being an inflammation of the *brain*; or in those of Cullen and Hoffman, who made it to consist in spasm of the capillary arteries on the surface of the body; or in those of Armstrong who made it to consist of a congestion of the brain, lungs or alimentary canal; or in those of Hildebrand, who thought it due to inflammation of the mucous membranes; or in those of Broussais, who regarded it as being the result of *gastro-enteritis*, as we do in those of Prost, Petit, Wagler and Louis, who make it to consist in a morbid alteration of the intestinal, chiefly the *Peyerian glands*. On the other hand, that fever is nothing more than a vital effort to expel morbid matter, (Hippocrates;) or an “effort of nature to throw off disease (Sydenham;) or a general *reaction of the organism*, accompanied with exaltation of the animal heat, and of the sensibility,” as is maintained by Cayol and a number of late German writers, seems, to want more proof.

Death from rupture of the Gall Bladder.—Dr. RICHARD WARNER, of Cornwall, Conn., died on the 29th of September, at the age of fifty-eight. Cause, rupture of the gall bladder from violent vomiting.

Death from Chloroform.—A young female, whose great toe was about to be amputated by one of the visiting surgeons of the Charity Hospital, suddenly expired while under the influence of chloroform. It was some time before she could be brought fully under the effects of the anæsthetic; she finally, however, became completely insensible, and before the operation was concluded, she sank, and rapidly expired, in spite of the most strenuous and judicious efforts of several medical men present. The usual precautions were used in its administration, and no censure can justly be attached to the surgeon or his assistants for the untimely result of the case.

A *post mortem* was made by the Professor of Physiology in the University of Louisiana, and all the organs were found to be perfectly healthy. A. H.—*New Orleans Medical and Surgical Journal*, January, 1854.

Mortality in New Orleans, for the Year 1853.—The total mortality of the City of New Orleans for the year 1853 has been 15,085; 7,899 deaths were from yellow fever, and 607 from cholera. This is the largest mortality that has ever occurred in New Orleans for a single year.—*New Orleans Medical and Surgical Journal*, January, 1854.

Faculty of Medicine of Paris.—The chair of Medical Chemistry in this Faculty, rendered vacant by the death of M. Orfila, has, by an imperial decree of the 10th of December last, been abolished, and in its place a chair of Pharmacy has been instituted, which has been filled by the appointment of M. Soubiran.

THE OHIO
MEDICAL AND SURGICAL JOURNAL.

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Columbus, May 1, 1854.

No. 5.

PART FIRST.

ORIGINAL COMMUNICATIONS.

ART. I.—*An account of a new species of Eruptive Fever, which prevailed in Willoughby, Lake county, Ohio, during the Spring, Fall and Winter of 1853.*—By F. C. GIBBS, of Willoughby.

About the middle of April, two persons living three miles apart, and having had no intercourse with each other, and living on roads having no connection by ordinary travel, were attacked with the disease, an account of which we are about to give. One of the cases we saw from the beginning. In due time, it proved to be an eruptive fever, bearing considerable resemblance to severe chicken pox, but still more to small pox. For the first eight days, we were engaged in making observations and comparisons, having in view the true diagnosis of the disease. In due time, a critical examination, external and internal, of the vesicles, made us certain that whatever might be the nature of the poison, it was not variolous. The other case we did not see; but a second case occurring in the family two weeks subsequently, to which we were called, enabled us to become certain that the two diseases were the result of the same specific poison. Synchronous with this third case, two others occurred three miles distant, and a mile from each other. More or less of the members of the families in which the disease had made ingress, became affected, and new cases sprang up during the season,

from time to time, in persons who had been in no way exposed to the sick ; so that by the middle of November, at which time the disease disappeared, there had been in my practice, twelve cases contracted without, and some forty-seven in consequence of, exposure to the disease. It was noticed that most, if not all those who contracted the disease without exposure, were in *ill health*, or otherwise laboring under embarrassments, favorable to the contracting of disease. A very few cases occurred besides those under my charge. With these preliminary remarks, we proceed to a description of the disease, leaving some details of the history to be supplied in their proper places :

This malady, in its usual form, is characterized by a regular succession of symptoms, and these occur in the order and form to be mentioned ; and it has a tendency to a specific termination. The symptoms, for convenience of description, and a correct appreciation of the disease, we shall divide into the following series :

1. Period of Invasion.
2. Period of Eruption.
3. Period of Despumation.
4. Period of Passivity.
5. Period of Desquamation.

PERIOD OF INVASION.—This stage is characterized by a feeling of prostration, slight chills, more or less, (but generally moderate,) and pain in the back and limbs. Head ache of a peculiar character, to-wit: Dull pain, with a feeling of insupportable weight, with dizziness and swimming. The skin in several cases may be hot, and more or less dry—tongue white—pulse accelerated. Nausea, and occasionally, though rarely, vomiting. If the disease is to run a benignant course, the skin may be simply dry and husky, but not at all remarkable for heat; the pulse but little accelerated, slight distress at the stomach, and the tongue not sensibly affected. This state of the system continuing till the eruption is fully established, when some amelioration of the system ensues.

PERIOD OF ERUPTION.—The eruptive stage is ushered in by the appearance of red points on the forehead. These extend over the face, breast, body and limbs, in the order enumerated, and usually reach the feet within twenty-four hours ; but they increase in number regularly, in such wise that forty-eight hours are occupied in the completion of the process. If, however, the disease is to be severe, and the eruption dense, the eruption, after its appearance on the

forehead, remains stationary for twenty-four hours, and then proceeds over the system as before, reaching the feet in forty-eight instead of twenty-four hours. The eruption, in the more severe cases, appears on the second day—on the third in a few, but in all medium cases, on the fourth day. In the slightest form of the disease, the eruption is delayed to the fifth, sixth and even the eighth day. During this stage, the vesicles become fully developed in form and size, requiring full seven days for each vesicle, or from nine to ten days from the appearance of the first, to the full developement of the last vesicle. The appearance of the eruption differs according to the part of the system it occupies. Thus, on the face, the eruption is papular, and upon each papulæ, at the end of the second day, a vesicle is formed. But in those severe cases, where the eruption remains stationary for twenty-four hours, this change is not consummated till the third day. On the body and extremities, as far down as the ankles and wrists, the eruption commences with dark red points. These gradually enlarge, having no elevation apparent to the eye, but having an indurated feel to the finger. On each of them, on the second day of their appearance, a vesicle is formed. On the hands and feet, invariably on the former, the eruption consists in oval vesicles, distended with colorless lymph. All the vesicles continue gradually to enlarge for seven days. The form which the vesicles assume during this stage, depends exclusively on the quantity of fluids contained in them. If this be small, they commence becoming *indented*—if more, *flattened*, or slightly oval—if abundant, *hemispherical*. But they never acquire an indented figure during their progress. Whatever be the *form* of the vesicles, the fluid in them has a uniform appearance. It is, during the whole stage, perfectly limpid and colorless. The diameter of the vesicles is from an eighth to a sixth of an inch. After the eruption is fully established, the fever usually subsides, and the system remains tolerably quiet, till the vesicles acquire such a size, and inflammatory action, as to induce a sympathetic fever. The severity of this, depends on the denseness of the eruption. If this be slight, little or no fever will be induced; if very abundant, the fever will run high. The fever usually commences about the fifth or sixth day. The eruption spreads upon the mucous membranes, and is indicated by the appearance on these surfaces of white points slightly elevated, but containing no fluid. They are first perceived about the fifth day of the eruption. In moderate cases, they produced no special disturbance,

but in some cases, about the sixth day of the eruption, the throat becomes sore and painful, and more or less cough comes on, with expectoration of tenacious mucous, and thus ends the period of eruption.

PERIOD OF DESPUMATION.—This stage comprehends the period during which the fluid in the vesicles comes to maturity. The term despumation, is regarded as most expressive of this occurrence, for, whether it be literally true, as Sydenham says, an “*imposthume* is an instrument of nature, whereby she expels whatever is injurious,” or that a change similar to this is “a fermenting process, whereby the blood is clarified,” as saith Dr. Richard Mead; or Liebig, who, speaking of certain poisons, says: “When introduced into the blood of a healthy individual, it will be again generated in the blood, just as yeast is re-produced from wort.” Whatever be the theory, it is certain that after the vesicles are filled to the utmost capacity, a change in the character of the fluid is necessary to a restoration of harmony to the system. This change consists in the conversion of *limpid transparent lymph*, to *semi-viscid turbid lymph*. As soon as this change is effected, which commences on the eighth, and is completed on the tenth day, harmony is restored to the system. The fever subsides—pulse returns to its usual frequency and qualities, the tongue is freed from its coat; the urine becomes normal; the appetite returns; in short there is an apparent, if not a literal clarification.

While these changes are going on within the vesicles, the cuticle covering them, and constituting their superior walls, changes to a yellow color. Their form is hemispherical. The face is more or less swollen, and at times, the eyes inflamed; so of the hands and fingers, especially if the cuticle be thick. The cough and expectoration continue, if they be present, through this stage. At the end of the tenth day, the change being effected, this stage is closed.

COMPLICATIONS.—It occasionally happens in this disease, that on the face, the vesicles stand so closely together, that when developed, they crowd each other so closely, that the walls between them are ruptured, and hence, they form one consolidated vesicle. When the same thing happens in chicken pox and small pox, they are said to be confluent, and treated as a separate variety. But as this condition is from an accidental circumstance, we regard it as a complication of the ordinary disease. In this case, the whole cuticle on the face being destroyed, much inflammation is induced. It is in these

cases more particularly that the mucous membrane of the tongue, and parts contiguous, is involved to a greater extent and considerable prostration is at times induced. If the patient be of good constitution, however, the eruption on other parts of the system, goes through its regular changes, in the usual periods of time, and terminates as in the uncomplicated cases. But if he be feeble, or in infancy, the appropriate changes are retarded, the vesicles remaining nearly stationary for several days, during which, prostrative and typhoid symptoms supervene; when, finally, if the disease is to terminate favorably, the change is effected and the formidable symptoms slowly subside. In the few cases that have terminated fatally, the vesicles have remained unchanged, continuing limpid and colorless. This consolidated vesicle contains but a small quantity of lymph, and though it is more tenacious than in the vesicles on the body, still it is so limpid that most of it, within a short time, escapes through the rents in the cuticle, leaving the latter with whatever lymph may still adhere to it, on the twelfth day, lying flat on the surface, in patches. These become partially dry, and are removed as early as the fifteenth day, leaving the surface more or less abraded, to be restored during the period of desquamation.

PASSIVE STAGE.—Returning to the uncomplicated cases, we repeat that at the end of the period of desquamation, the active symptoms of the disease will have subsided. But the vesicles are still distended with lymph, and health cannot be restored while these remain; and if left to themselves, they remain many days stationary—the external appearance, and the internal fluidity, seeming to have assumed a perfect statu quo. Hence, we denominate this the stage of passivity. The only appreciable change in the vesicles, for several days, is, that they become slightly more limpid. The length of time which the fluids remain, will depend on the thickness of the cuticle, and the part of the body on which they are. Thus, on the back they are generally ruptured as early as the twelfth day, in consequence of the recumbent position, and a disposition on the part of the patient to rub, with a view to relieve the itching. On the abdomen, arms and legs, they will remain to the fifteenth or twentieth day; and on the hands and feet, much longer, still retaining their fluidity. The vesicles finally burst and the fluid escapes, leaving the derma exposed, but opening a way for recovery during the period following. This is the rule, but occasionally the lymph becomes congealed into a thin scale, the unbroken cuticle still remaining.

This stage may be cut short many days by rupturing the vesicles and allowing the fluids to escape, and thus bringing on the

DESQUAMATION PERIOD.—A peculiarity of this disease is, that the fluids do not dry up and form a scab, but escape, leaving a base excoriated, which, like an ordinary abraded surface, after two or three days, is covered by a scale or thin scab, which, after a time, falls off, either leaving the surface restored, or to be succeeded by another, or a series of them, till a cure is effected. In the ordinary cases, the derma not having been injured, no permanent marks will be left, but if, as is frequently the case, it be injured, it may be otherwise. In the other cases, after the cuticle is removed, a succession of scales succeed it, leaving the face more or less rough and uneven, and when it has been much ulcerated, disfigured by cicatrices. In two or three cases, more or less injury to one eye has been produced from the disease, and small abscesses have occasionally been noticed; but generally, this affection seems to have no tendency, permanently to impair the constitution, or to be succeeded by disease in any form.

IRREGULAR FORMS OF THE DISEASE.—During the progress of the disease, we have occasionally found imperfectly developed cases, wanting in more or less of the ordinary symptoms of the disease, but which are capable of imparting to others the genuine disease, and hence require a cursory notice:

1. We find cases having all the symptoms peculiar to the invasive stage, when, on the third day, instead of the ordinary eruption, and efflorescence breaks out, first over the forehead, face and breast, and within twenty-four hours, spreads over the system. The eruption in these cases is not unlike that modification of rubeola, known as rubeola sine catarrho. It continues three or four days, the febrile symptoms subsiding with the receding of the efflorescence.

2. Again we find the eruption stage passing along mildly, but in the usual manner, no eruption appearing till five, six, or even till the eighth day, when finally, a few pimples appear here and there over the body, and synchronously therewith, the febrile symptoms subside, and the system returns to its natural condition.

3. Still others pass through the first stage as usual, and on the fourth day, the eruption breaks out, papular, and on a more narrow base, than the ordinary disease. On the second day of the eruption, a vesicle arises on the apex of each, very small and globular. They slowly fill, retaining their original form, and coming to maturity on

the sixth or seventh day. The matter in them is more tenacious and yellow, than in the ordinary disease, and they more frequently desiccate. We noticed but few of these cases. They seem to result from idiosyncrasy in those persons affected by the disease.

PATHOLOGY.—No post mortem examinations have been made. We have given the external appearance of the vesicles. On the internal we now speak. The location of the vesicles, is between the cuticle and the rete mucosum. The lymph, through all stages of the disease, is in a single cavity. A puncture at any point will permit all of the fluid to escape. On making a transverse section of a vesicle, at any stage of the disease, and wiping away the lymph, a single cup like cavity will remain. About the twelfth or thirteenth day of the disease, the rete mucosum separates from the derma, and after floating loose in the cavity of the vesicles for a day or two, rises and becomes attached to the cuticle. The bottom of the cavity seen after this separation, presents a uniform level, showing no appearance of ulceration, or a central point. A careful and vigilant observation, shows that no fluid is deposited under the membrane previous to its separation.

PERIOD OF INCUBATION.—This is two weeks. We have never found it less, and though it may at times be more, there is no certain evidence of it. It is known that the disease may be contracted during the period of invasion, and the probabilities are, that it is generally contracted during that stage; but it may, perhaps, also be imparted at other stages of this malady.

DIAGNOSIS.—This malady can be mistaken for no disease except chicken pox, or small pox; and while the milder cases most resemble the former, the more severe have been mistaken for the latter, both by persons in, and out of the medical profession. And as the writer has strong reasons for believing that the disease has prevailed in more places than one in our country, and that to a greater or less extent, its true nature and relations have not been appreciated by all, the indulgence of the reader is solicited, while we speak somewhat in detail of the diagnostic symptoms, which separate the disease from small pox. They are unlike in respect to the following particulars: In the period of incubation—in the time at which the eruptions appear—in the symptoms during the period of invasion—in the form of the eruption during the early and middle periods of the eruptive stage—in the anatomical arrangement during the same period—in the time required for the two diseases respectively, to come

to maturity—in the external appearance of the two immediately after the maturing period—in the quality of the contents of the two, *at the maturing period*—in respect to the material out of which the scab is formed—in the time required for the removal of the crust upon the face in the complicated or confluent cases—and in the location of the two diseases in respect to the layers of the skin. These distinctions will be more readily brought to view in the following arrangement :

RECENT ERUPTIVE FEVER.

1. Period of incubation, *two weeks*. Not certain; but it may be longer in some cases, but certainly never less.

2. Duration of precursory symptoms, from *two to four days*, and in some cases, *five, six*, or more days.

3. Seizure *gradual*, vomiting rarely; sense of *weight and swimming* always; moderate *pain in back* and limbs—no cramps in *early stage*, or convulsions in *any stage*.

4. The vesicles are in a single cavity. A single puncture will remove all the fluids, if pressed. A transverse section being made, the remaining portion will be a *single cup*.

5. The vesicles never pass from an oval form into a depressed, indented or umbilical figure.

6. The vesicles come to maturity on the tenth day of the eruption.

SMALL POX.

1. Morely's observation, 8 *days*; Gregory puts it at from 10 to 14 *days*; Watson 12 *days*, Wilson, from 6 to 20 days—being *variable but less* in time.

2. Precursory symptoms vary little from *three days*--“severe cases *early third day*—moderate cases *late on the third day*.” (Cullen.)

3. “Seizure *sudden*,” (Bartlet.) “Nausea vomiting and intense pain in the back.” (Chornel.) “Cough and convulsions frequent during this stage.” (Wilson.)

4. The pock “exhibits in its early stages, a *cellular structure*.” (Gregory.) “If during this stage, a transverse section be made, the vesicle will show a cellular structure, and its appearance will be like a severed orange.” (Bousquet.)

5. The elevated papulæ on the third, fourth and fifth days, *pass into a depressed, indented or umbilical form*. (Wilson.)

6. Maturity is accomplished on the eighth day. (Watson.) “On the eighth day the suppuration process is completed.” (Bartlet.)

7. After coming to maturity, the vesicles remain in a passive state for several days, the *yellow* external, and the internal fluidity remaining unchanged.

8. The change at the period of maturity consists in the conversion of the fluid in the vesicles, into semi-viscid whey-colored lymph.

9. When the vesicles are ruptured, the *lymph being limpid, escapes, and some days afterward, thin scales or scabs are formed on the abraded surfaces.*

10. The vesicles are situated between the cuticle and the rete muscosum.

11. The vesicles through every stage contain but one cavity, and are never divided by a transverse membrane.

12. In the complicated cases, the face is always cleared of its cuticle within five days of the period of maturity. Does not form a consolidated scab, but lies in patches, and is detached in separate portions.

7. About the eighth day, a dark spot makes its appearance on the top of each turgid pustule, (Watson,) and *at that time commences the drying up of the pus and pustular discharges, and the conversion of these fluids into scabs.* (Wilson.)

8. "There is a conversion of the contained lymph into pus." (Wilson.)

9. Desiccation is indicated by the drying up of the pus, and purulent discharges, produced during the period of eruption, and by the *conversion of these fluids into scabs.* (Wilson.)

10. Velpeau and Herming believe its seat to be in the follicles of the derma, and all believe it at least as deep as the rete muscosum.

11. When a well formed, mature pustule is formed by dissection, it will be found to be divided in its interior by a transverse membrane, forming *two chambers, both containing pus.* (Wilson.)

12. "In the severe cases of this kind, the crust forms a complete mask to the features, and remains attached for ten or twelve days." (Wilson.)

The above are only some of the more important differences which exist between the disease we are speaking of, and Small Pox. We might pursue the contrast still further, but we believe the foregoing to be sufficient to satisfy the mind of every individual who has a just appreciation of the laws of diagnosis.

IS IT A MODIFICATION OF SMALL POX?—To answer this query, it may be well to inquire by what causes small pox may be modified. It may be modified 1st by inoculation of the variolous poison. 2. By the previous subjugation of the system to cow pox. 3d. By person idiocracy. 4. By a previous attack of small pox.

We can now answer that the malady has not been modified by inoculation, or small pox, because but six of these have been exposed to our epidemic, and though three of them had it, one in its worst form, and two mildly, yet the history of these cases in no way varies from the cases of corresponding severity in those who were entirely unprotected by the variolous poison. It is clear that though personal idiocracy may affect individual cases, it cannot change a whole epidemic, and no two cases modified by this cause would be identical.

Lastly; is the disease that modification of small pox known as Varioloid? Two facts show that the thing is impossible. 1st. There has not been the slightest anatomical difference between the vaccinated and the unvaccinated cases, and so of the mild cases. 2d. Only a certain proportion of the cases had been subjected to the cow pox virus. The others, of course, could not have been varioloid.

If, then, the disease be a modification of small pox, it is a modification hitherto unknown. But, that it is not even such a modification, we are inclined to believe, for the following reasons: A disease which is but a modification of another, has no persistent constitution of its own. For example—Varioloid is a modification of variola, and it has three or four distinct kinds of eruption, which in an epidemic occur with perhaps equal frequency, and these varieties intermingle in unending succession. Again, modified forms of a disease usually occur at the same places where, and contemporaneous with the disease, of which they are a modification—thus the Buffalo and Philadelphia Journals show that in sundry places, small pox has recently prevailed, and that it was accompanied by many modified cases—but there *a proportion of the cases were true small pox*, and hence the unique cases were easily understood. On the contrary, in our epidemic, this disease has a constitution of its own—a very large proportion of the cases going through their regular stages in regular succession, in uniform periods of time, and terminating in a specific manner. The modified cases not being in greater proportion than what is usual in kindred affections, hence we regard ourselves justified in placing this malady in the catalogue of ills as a new disease.

PROGNOSIS.—A few words will suffice on this point. A favorable termination may be expected if the patient have passed the period of infancy and is of good constitution. Five cases out of sixty have proved fatal, but two were infants, one of three months. One had disease of the heart, one a fractured femur, and one may be traced to great indiscretion on the part of the patient. Still the complicated cases are fearful, and to some extent compromising both life, limb and features, and deserve serious consideration.

CAN IT BE A NEW DISEASE ? (!)—To most persons, the announcement of a new disease, like a new discovery in science, is received with little favor. We are accustomed to think that all the physician has to do in diagnosis, is to refer to the books, where we suppose all diseases to which the system has been, or can be subjected are arranged in Nosological order ! And Physicians, too, often think in the same circle. For example, an eruptive fever, like the one we are treating, occurs. It resembles chicken pox, and especially smallpox. “ Well,” soliloquizes the Doctor, “ it is true the disease *resembles* chickenpox, but it is too severe for that disease, and it must be either chicken or small pox, ergo, it is small pox.” The probability, or possibility, of a new disease is not entertained, and hence, diseases radically different are huddled together, pell mell, in “ confusion worse confounded.” For ourselves, we object to this method of jumping at conclusions as alike detrimental to the interests of a just pathology, or successful practice. For, why should it be thought anything incredible that a new disease should arise ? Was such a thing never known ? Did not Procohis, in the sixth century, speak of a new disease “ for which no reason could be given but the will of God ?” Was not Measles a new disease in the tenth century, and Scarlet fever in the fifteenth ? Where was the Sudon Anglicanus till seen and described by Caius in 1551 ? —Or the Dengue before 1780, and the Epidemic Cholera before the eighteenth century ? Does the reader remember the mortal colic which depopulated Spain in 1600, a disease never known before or since ? But why should we particularize ? New diseases are thick around us, and no physician has practised his profession successfully who is not aware of the fact. And it is just what every man ought to expect, who is alive to the changes that are going on around us. Impurity pervades earth and its appurtenances. Water, so essential to our existence, contains ever varying sources of impurity. Carbonic acid from the air and mineral poisons held in solution, and

evaporation from the surface of the land, carry with it subtle poisons, which are constantly entering our system. The effect of electricity, not only the learned, but thinking men everywhere, are now aware, is not confined to those rare periods when—

“Wide bursts in dazzling sheets the liquid flame,
And dread convulsion rends the ætherial frame,”

but its evolution from water, and its constant presence in the atmosphere, is recognized as producing constant and varying impressions on the body and mind. Hence as we are having new impressions made upon us, it is to be expected that new effects will be the result.

When we speak of new diseases, however, we do not wish to be understood as asserting that they are absolutely new; they may have previously existed, but if so, those who saw them failed to describe them with accuracy; and hence they are *new* to us. Now, when such diseases first appear, they are very frequently mistaken for the diseases they most resemble—thus measles was for a time confounded with smallpox, scarlatina with rubeola, and cholera with cholera morbus, and our eruptive fever will, among superficial observers, be mistaken for variola. Indeed the resemblance between cholera and cholera morbus is much closer than between our disease and small pox. In both there is profuse vomiting, in both copious purging, in both cramp in the legs and abdominal muscles, in both great prostration and a tendency to collapse.

Whether our epidemic be produced by a new epidemic tendency, or the mingling together of the specific causes of two or more kindred diseases, it is as unnecessary to inquire as it is impossible to decide. Be this as it may, it would seem that similar diseases have been witnessed, though imperfectly described; and they too, have been mistaken for small pox. Thus Dr. Bartlett says:—“We sometimes witness a singular mixture of these diseases, when the greater size of the pustules, the increase of the local inflammation, and the general fever, have lead to the disease being mistaken for small pox, which formerly led to the mischievous error of putting the sufferer off his guard against that disease. Sydenham also mentions a disease which prevailed in his time, *called* small pox, which was not the regular disease. He thus speaks of it: “The small pox which prevailed during this epidemic, spared none, not even allowing those to escape who had *had the bastard* kind, which is in no way akin to that disease.”

That our disease is from one or the other of these causes, there seems to be no room to doubt, by those who examine things by the light of nature, *as it is*.

We acknowledge that there are some *very old* opinions with which our views do not harmonize. Mr. A., a disciple of ancient memory, contends that all diseases are as old as the world, and are the result

“Of man’s first disobedience, and the fruit
Of that forbidden tree, what mortal taste
Brought death into the world, and all our woe.”

while Mr. B. contends that the solution of this gordian knot is to be found in the less grave, but more artful, and equally scholastic philosophy, found hidden away among the mouldering archives which take hold of those ages which reach ancient Mythology. Here we find the mysterious box which Jupiter gave to Pandora, and she to her son Epimetheus, and through whose unpardonable inquisitiveness *all the raging distempers we now feel* have spread over the earth!

But Mr. C., a disciple of Homer, assures us that he has learned that—

“On mules and dogs the infection first began,
And last the vengeful arrows fell on man.”

We shall not at present wait to inquire to which of the above theories they incline, who think the opinion of a new disease incredible, but proceed as advocates of an inductive philosophy, to speak of the

CAUSE OF THE DISEASE.

The history of the origin of the disease demonstrates its atmospheric cause. The first two cases occurring synchronously, without an exposure, either known, or suspected, in either case—the cases being so situated in respect to social intercourse and roads, that if an accidental exposure to a pre-existing case, were possible in a single instance, the two would be inexplicable; but when to these be added the occurrence of two more within three weeks, alike inexplicable as to their source, it is as clear as a moral axiom, that they are to be regarded as having an ærial origin. Thus introduced, the disease was found to be “catching” to some extent. No individual has contracted the disease by a casual visit to the sick rooms, but of those who were over it through a course of the disease, about *one half* contracted it. The disease then spread in two ways by

infection in the air, and by injection, or by contagion if you prefer, from the persons who were laboring under it. Indeed, a full investigation of the facts in these cases, convinces us that all contagious disorders are kept in existence by an air which elaborates the poison, rather than from poison arising from the bodies of the sick. To this conclusion we incline for the following reasons:

1. These diseases must have originally commenced from some poison in the air or otherwise, *prior to the development of the disease*, and if so, the same condition may recur from time to time, or remain more or less permanently fixed.

2. The rapidity with which such disorders run over countries, shows their atmospheric cause. For example, Scarlatina has been known to spread over several States in the space of two or three months; and small pox in a single season, in 1614, spread over Alexandria, England, Crete, Turkey, Flanders, Poland, Calabria, Italy, Dalmatia, France and Germany. To suppose that this could be done, except in an air which elaborates the poison, is absurd.

3. These diseases have their periods of dormancy and activity. Thus Sydenham found that small pox and dysentery alternated, the latter prevailing from July to December, and the former from December to May following, and so on for a series of years.

4. Doctor Gregory states that a large majority of those who come to the smallpox hospital had not been exposed to that disease.

5. Facts show that persons in *solitary confinement* have contracted the smallpox, thus proving its atmospheric origin.

6. To these may be added the fact that these diseases do not at all seasons spread, except by immediate contagion, no cases occurring which could not be traced to exposure to the sick—though as great facilities were offered for its spreading epidemically, as existed in seasons in which they over ran whole countries.

INFLUENCE OF VACCINATION.

When the disease first commenced we were anxious to ascertain whether vaccination would have any influence over it, and if so, how much. But the first cases having been vaccinated—and one of them but six months before, and this being one of the most violent cases, and finding the next two cases, one of which was also violent, had also been vaccinated, we had little hopes from that

source. Looking through the epidemic we find that, of the *twelve* cases who contracted the disease without exposure, *nine* had been vaccinated. But as vaccination was afterwards practiced, we have not been able to ascertain whether more would contract the disease if left unvaccinated, than otherwise. In some instances, circumstances would seem to warrant the opinion that *it did*, but in others, the *reverse*. In one family of eight persons, *one* of whom had had *small pox*, *four* had been vaccinated and *three* unvaccinated—all had the disease. In some instances, persons exposed to the disease, though unvaccinated, escaped; but as most persons were vaccinated when the disease first entered the family, we have had narrow means for the establishment of data.

These are briefly the facts in regard to vaccination. One fact in relation to small pox. During the epidemic six persons who had small pox, were exposed to the disease, by attending on the sick, and of these three had the disease. Williams says one in *two hundred* will have small pox a second time. How does this fact stand compared with the opinion that the present epidemic is simply variola. We have heard it said that the greatest orators and logicians have been silenced by the force of a single fact.

As a general rule, it has been set down that one in twenty, who have been vaccinated will contract varioloid, and very rarely indeed true variola, all which so far as it goes, is in favor of the view we have taken of the disease; but we are not disposed to depend on any extraneous evidence as a means of diagnosis. The decision of that question depends on the disease itself.

Besides, be the effect what it might, no certain conclusions, perhaps, could be drawn from that source. If it were shown that vaccination protected persons against any given disease, it would only show that it protected them against *two diseases* instead of one. All are aware that it has been ascertained that vaccination affects favorably other diseases than small pox—for example, ophthalmia, bronchitis, hooping cough, &c. It has also been found that at least one poison, *known* to have no relation to small pox, is equally protective against small pox as vaccination. Hence, even if it were admitted that vaccination protects against small pox, *in consequence* of the two diseases being *essentially the same*; still it is seen that identity is not necessary to the *possession of protective powers* against other diseases—therefore, vaccination protecting the system against a disease, does not show that the disease has any relationship either

to cow pox or small pox, and hence is not a legitimate means of diagnosis. Besides, we strongly incline to the opinion that those who have labored to show that cow pox and small pox are the same disease, have as yet failed. It has perhaps been proven, that in a few rare instances, small pox has been reproduced in the cow, horse, dog, sheep, &c., and that the disease thus reproduced has been again established in the human subject—but that natural vaccine or cow pox, and the inoculated or the casual variola vaccine, are one disease, we think still requires proof.

CONCLUSION.

Wilson remarks that “it is utterly impossible to confound the mature pustules of small pox” with any other disease of the skin, and we believe the remark to be true; and we add that we think it would be equally impossible for any individual to witness the series of cases which we have seen, and endeavored faithfully to describe; and examine them as we have done, through all their stages, and yet mistake them for small pox, or any other affection. It is by no means wonderful, however, that even a respectable physician, with a limited means of observation, should mistake in the diagnosis of a disease having so many *general resemblances* to small pox, as our disease possesses. Many have been deceived by resemblances, mistaking them for *identity*. How close the resemblance of spurious coin to the genuine! How many tolerable judges have been deceived by counterfeit paper! In the trial of Dr. Webster for the murder of Dr. Parkman, unimpeachable witnesses swore that they saw the latter in the streets, when in truth the Doctor was at the time dead! It was a man who resembled him, and if the witnesses had made a closer observation, they would have discovered their mistake.

It has been an interesting question with us, whether this disease has prevailed in other parts of the country. Already we have found a disease *probably identical*, which prevailed in the latter part of the past winter and spring in Erie county, Pa. We received an interesting communication from Dr. Spencer, the physician who attended most of the cases of that malady. We take the liberty to make a few extracts from his letter, and we shall continue the inquiries as respects their identity.

He says. “Here and there a case occurred like true variola, to the casual observer, who had not investigated the case, but who, after a close investigation, could discover a great contrast.” * *

The vesicles were elevated above the surface, and did not present that depressed appearance that is so strong a mark of true variola. * * * Vaccination had no influence over it. The worst cases I saw had been thoroughly vaccinated. * * * The contents of the vesicles were much more watery than small pox, and did not have the appearance of pus." Our friend also remarked that "great excitement prevailed for a time" in his neighborhood. It was to be expected. He had discovered something new, and every man who discovers an important truth, or fact in science or art, in neutral or moral philosophy, unless it be so plain that "a fool cannot err therein," must expect, like all his predecessors, to be soundly abused for the discovery. Well do we remember that the pious cotemporaries of Dr. Jenner represented him as "a horrible monster, with the horns of a bull, the head and hoofs of a horse, the jaws of a krakin, the claws of a tiger, the tail of a cow, and all the evils of Pandora's box in his belly," simply for the discovery of a fact which his neighbors did not appreciate! Nothing is more certain, than that in this disease, the unscientific observer, or even the man of science, if he be an *old foggy, dyed in the wool*, will see little else than small pox in disease like this. And in such an emergency the fears of the masses, always electrified at the bare thought of small pox, blind their judgment, and hence the two classes accidentally fall into *harmony*; and the former become oracles, for the time being, for the latter. Then all the false and exaggerated stories of the contagiousness of small pox, which the ignorance and the fears of a score of generations have invented, are raised from the dead, and every man who has in any way approached the sick become walking pestilences, upon whose garments a frightened multitude can see a bristling array of mortally pointed arrows, ever ready to dispense putridity and death! In short, like the British colonels in the days of our fathers, they are prepared to

"Think horned bugs bullets all through fear,
Musketoes take for musketeer."

There is a moral, as well as a physical contagion; and many of us have experienced more or less of the noxious qualities of both. In such circumstances nothing but a *knowledge of the truth*, and a clear perception of *fallacy*, can prevent a contamination.

Such an one is reminded of the lion and the ass who went hunting together. The ass went into the cave and kicked and brayed

and made a mighty fuss, and thus succeeded in frightening the goats. When the ass came out of the cave, he asked the lion if he had not made a noble fight and routed the goats properly. Yes indeed, said the lion, and I assure you, you would have frightened me too, *if I had not known you to be an ass.*

But to show that these pedestrian *street professors*, who teach that small pox *is portable* on the garments of *casual visitors*, and even so positively so, as to warrant the unqualified assertion that in an epidemic every case which has not been traced to actual contact with the sick, has resulted from that source, are better “posted up” in superannuated medical hypotheses, popular errors and vulgar conceits, than they are in the medical literature of the day, we will refer the reader to the opinions of a few of the most erudite modern authors on that subject.

Prof. Dunglison, in his practice says, speaking of the small pox virus—“the contagious miasms can attach themselves to clothing, and if air be excluded from the fornites, they may communicate the disease for a long time afterwards, * * there can be no doubt, however, that free ventilation will prevent this; for the author has never known a case in which the practitioner has been the agent of conveying the disease from one house to another.”

Dr. Gerhard, in his notes on Tweedie, takes the same ground.

So does Dr. Wood. He says in his practice, speaking of the variolous poison—“it appears to be easily *dissipated by the air*, so as to become *inert*, for well authenticated cases are very few in which physicians have conveyed it from person to person.” Being satisfied that this judicious author did not design to be understood by the *rare cases* spoken of, that there was any certain evidence that the disease was ever so conveyed; we addressed him a private note, to which he generously responded, that he “had never met with an instance of the kind personally”—that the case to which he referred, was that of a child who contracted small pox before leaving the room, and hence it was supposed that the physician might have conveyed the disease to him. The author continues—“but as the disease must have been more or less prevalent at the time, it is impossible to say that the child might not have contracted it from some other source.” Indeed, it would appear evident that the child did contract it from ærial influence, because as we have seen a person in solitary confinement has taken it, demonstrating that the disease *may be taken in that way*—whereas the instance cannot be found, to prove the former position, that we are aware of.

Dr. Condie, the reputable author of invaluable medical works, takes unequivocal ground on this subject. He says—"I do not believe that the physician, or any one, who shall casually visit a patient laboring under small pox, can have his clothes so imbued with the variolous contagion, as to be able to communicate the disease to any unprotected individual with whom he may subsequently come in contact. In the course of a long and extensive practice, including a period during which our city has been visited by several severe epidemics of small pox; I am certain that I have never conveyed the disease to a single individual," &c.

With these quotations we close—we make them hoping that, by drawing the attention of the profession to the subject of the evil consequences of this popular error, our brethren may be induced to prescribe the *pills of truth*, and thus "*open the eyes of the blind*," and then shall error

"Flee quick away from the pursuing sight,
Till it is lost in shades, and mingles with the night."

ART. II.—*Cholera, its cause and treatment.* BY THOS. W. GORDON,
M. D., Georgetown, O.

MR. EDITOR:—

I do not design writing an elaborate article. But to comply with a promise made to the lamented Howard, late Editor of the Ohio Med. Surg. Journal. I send you a short paper on epidemic Cholera, with some correspondence in relation to it.

In the paper on Cholera, published in the fifth No. of vol. fifth, there were several typographical errors; in one case, fifty grains was made to read one grain.

Dr. Howard under date, of August 5th, 1853, wrote as follows:

DR. GORDON,

DEAR SIR: I take this opportunity to apologize for failing to make the errata for your article. I was sick during the whole month of July, &c. * * * *

The No. was left in the hands of friends, who did not get hold of your letter of corrections; I intended to have executed the errata as you desired, but I was not able to do it.

After all, I do not think it very essential, as every man would see that there was at least a mistake, and would make the correc-

tions for himself, guided by the tenor of the article, and the size of the doses in other instances. I had a letter from Dr. Hewins of Indiana, who said he was about to write an article for my Journal, on the subject of quinine in Cholera. But on reading yours, and finding your views and experience, exactly in accordance with his, he considered it would be tautology to do so. I urged him to write, as, if the doctrine was true, no matter how much was said about it, the more the better, perhaps he will write yet; can't you write another article? * * * *

Your friend,

R. L. HOWARD.

After receiving the above, I received Dr. Hewins's address, and wrote him on the subject, requesting his experience in the treatment of Cholera with quinine; the subjoined is a part of his reply.

ROCKPORT, Ind., Sept. 20, 1853.

DR. GORDON,

DEAR SIR: Your letter of inquiry is received, and contents noted. In reply, I will here say, my answer must be short just now, as I am much hurried in business. But at a more leisure time, I should be glad to give you a more extended account of my practice in Cholera, and my treatment. Since the receipt of yours, I have been looking for notes, which I made at the time the disease prevailed in our midst, but have not succeeded in finding them, however, I have a note book that never fails me, especially when the facts have been so visibly impressed upon my mind, (I mean my memory.) Dr. Howard informed you correctly, I have used quinine in treating Cholera, and I am forced to look upon it as *the remedy*. I have had an opportunity of testing its virtues for two years in succession, and during the whole time, I used quinine, I lost *not one* patient, while others around me, treated Cholera patients differently, and most of them died, do not understand me as saying, that I think quinine will control this disease in every case, for such seems hardly possible; but in our present state of knowledge of diseases, and remedial agents, I do think quinine far superior to any thing with which we are acquainted. * * * *

I am sir, very

Respectfully, yours, &c.,

L. T. HEWINS.

It is customary with the different religious denominations of the world, to have a *creed* or articles of faith, as a synopsis of their be-

lief, and knowing of no good reason why we may not adopt something of the kind in medicine, or on different medical topics. I hereby send you mine in relation to cholera.

Article 1st. "I believe" that Cholera depends upon a reduction of nervous force in the cerebro spinal system.

Article 2d. "I believe" this reduction depends upon high atmospheric temperatures, or a change from high to low temperature, and possibly *vice versa*, but electric conditions, &c.

Article 3d. "I believe" the derangement in the cerebro-spinal system, produces a similar derangement in organs through its union, with the sympathetic system.

Article 4th. "I believe" intermittent fever depends upon the same cause for its origin.

Article 5th. "I believe" that quinia is capable of arousing to action, the cerebro-spinal system of nerves, and consequently, capable of curing Cholera.

The question will immediately arise; why do you believe thus?

Having noticed the very great resemblance in the two diseases, i. e., the near resemblance of collapse Cholera, to a hard chill in intermittent fever, I immediately tried to think of some cause that might satisfactorily explain the phenomenon. I had seen cases where complete insensibility, had been produced by what I supposed to be the peculiar effect of that nondescript, known as malaria; in which quinia restored the individuals to consciousness and health in a very short time. I had also seen cases of uterine hemorrhage, which I believed to depend upon the same cause, and treated them accordingly with entire success, in the first mentioned cases, i. e., those of spasm or complete loss of sensibility. I attributed it to the impression made directly upon the cerebro spinal system of nerves. That of the second, I believed to depend upon a loss of tone produced the same way, but showing its action upon the uterus, through the union of the sympathetic system with the third and fourth sacral nerves. In these cases, as before stated, I found quinia invariably controlled the hemorrhage.

A case of this kind, I have had under treatment within the last few days, which was controlled without trouble by its use, after resisting the usual remedies.

This woman has been subject to hemorrhage attacks for several years; at one time, she was confined to her bed for six weeks, with

an attack (as she says) similar to the last, and treated as is usual in those cases.

Believing that the resemblance existing between a severe chill in ague—and collapse in Cholera, must have a similar cause to produce the effect ; I at once used sulphate of quinia to control the disease, with acetate of morphia to relieve the pain. The disease was controlled in fifteen cases, the only cases that I have had an opportunity of trying it upon.

Will this theory account for the intense gastric irritation ?

In intermitting fever, we know there is an oppression of the stomach, and frequently vomiting ; why is it ? Simply because the impression from the nervous centers is carried along the two pneumogastric nerves to the stomach itself, and also to the sympathetic of the solar plexus. The nerves of the stomach being large, the effect upon that organ must be great.

Will it account for non-secretion of bile by the liver, or the flow if secreted ?

Here, again, the cerebro spinal system, through the pneumogastrics, and especially the left one, gives the supply of nervous power, with the assistance of the sympathetic, through the cœliac plexus, a loss of power, or an increased action beyond the healthy standard in the cerebro spinal system, would consequently destroy or derange the proper function of the liver. Will it account for the non-secretion of urine in Cholera ? Here, as in the liver we find that the kidneys are supplied with nerves from the cerebro spinal, and sympathetic systems, and doubtless the effect would be a loss of power to perform their proper functions.

Will this theory account for the transuding of the serum, through the vessels into the intestinal canal ?

The splanchnic nerves belong really to the cerebro spinal system, or they at least contain much more of the spinal nerve fibre in their composition, than they do of the sympathetic, as is shown by their firmness and color. The superior mesenteric plexus of nerves is also quite white and firm, showing the spinal nerve filaments in its composition ; this plexus supplies the mesenteric artery with nervous power, with the assistance of an union with the right pneumogastric, and the cœliac plexus. Such an union, and appearance proves at once its cerebro spinal preponderance of nervous force. This plexus also supplies the jejunum, ileum, ascending and transverse, colon with nervous power, and furnishes the arteries of the

abdominal viscera with nervous force. Then, if there should be a loss of power in the cerebro spinal system, would not the arteries supplied with nerve power, principally from the spinal fibres loose their power also? and would not the serum, per consequence, pass rapidly through the debilitated vessels.

Now what is the history of Cholera, and what the temperature where it has raged, as gathered from those who have watched its action closely in the different places where it has prevailed as an epidemic.

The Official Circular of the British Board of Health says, "The climate of St. Petersburg, especially in Spring, is damp and relaxing, and the inhabitants are very subject to typhus fever, diarrhoea, dysentery, and schorbutus," ***** And, in speaking of the symptoms of Cholera, "The disease assumed two distinct forms or *stages*, one of which was characterized by an increased action of the *nervous*, and sometimes of the vascular system, together with great derangement of the digestive organs; the other by a *prostration* of the *nervous* and *circulating* function; in a certain proportion of cases the disease passed through both their stages, presenting many varieties, according to the combination and predominance of the symptoms, either of excitement or prostration. In others, the period of excitement was altogether wanting, and that of prostration characterized the whole course of the disease. The morbid principle which acts as the proximate cause of the disease, excited thus in some cases an imperfect reaction, followed by prostration; whilst in others, it seemed so completely to depress and paralyze the powers of life, that the patient sunk without an effort of the constitution at reaction." Now this description seems to me to agree with the theory that it is an impression made directly upon the nervous centers; and that when the person attacked is of a peculiarly nervous organization, or the cause is intense, then the patient is stricken down without sufficient power being left in the nervous centers to react in the least, and I think similar to those cases that I have referred to in the beginning of this article, as being prostrated by spasm in one form of intermittent fever: and, again, those where reaction took place, through the effort of the constitution, I believe to be similar to those cases of remittent and intermittent fever most common, though of a higher grade of disease, or one that is more intense in its action upon the animal economy. Again, from the same paper—"The *stage* of excitement was usually ushered in by shivering, giddiness,

and great faintness ****. These symptoms, which were usually in persons of robust constitutions, *after lasting from six to about twenty-four hours, were succeeded by the period of prostration or COLD STAGE. ****.* Thus the whole surface of the body became as cold as marble, and covered sometimes with a clammy moisture, the pulse extremely feeble, and often imperceptible, the face sunk and the features contracted sometimes nearly half their natural size; the eyes sunk deep in their sockets, *and surrounded by a dark circle and the pupils generally dilated, the cheeks, hands, feet and nails assume a leaden blue or purplish colour. **** The disease in a few cases set in suddenly, with great prostration, terminating in death without any reaction, in the course of six or eight hours; *this was its most malignant and appalling form*, well designated by the French, *Cholera foudroyant*. There was sometimes very little vomiting or diarrhoea; in such cases, the prominent feature being prostration and cramp. When reaction took place, either spontaneously or by the aid of remedies; this did not always terminate in restoration to health; but the Cholera was often succeeded by various cases of secondary disease; the most frequent of these was Typhus Fever, *between the congestive state of which, and the force of the morbid derangement in Cholera, there is considerable analogy.*"—*N. Y. Annalist*.

Dr. Garrod says, "In the first place it would appear that the Cholera poison, when introduced into the blood in sufficient quantities, causes an intense exosmotic action of the alimentary canal, at the same time destroying its endosmotic power. The blood, therefore, being deprived of a certain amount of water and salts, by the intestinal evacuations, and not possessing the power of regaining these by absorption from the stomach. ***. But a question now arises, Is this condition of the blood essential? And cannot the *stage of collapse* be induced by the direct influence of the poison? There are certain cases known as *Cholera Sicca*, which would seem to favor this view.—*London Jour. Med.*

Now, does it seem unreasonable to attribute this exosmotic power or action in the intestinal canal to a loss of one in the cerebro-spinal system of nerves, and the restoration of the endosmotic power to a restoration of nervous force.

Dr. Børstler says, in a letter to a friend, when speaking of collapse Cholera, "It did seem to me that many patients were hurried off by the incessant frictions expending the little remaining nervous power."—*Ohio Med. & Surg. Jour.*, Vol. 1st, p. 377. In all re-

ports upon Cholera that I have examined, when any thing is said of the state of the atmosphere, it has been declared to be of a very high temperature at or about the time Cholera had made its appearance in the locality where the report was made. Mr. J. Sullivant, of Columbus, Ohio, says, of the temperature at the time Cholera broke out in that city in 1849, that the 20th and 21st of June, were the hottest days they had had that summer, experiments on two thermometers—a wet and dry bulb, placed in the shade, ranging from 84 to 87 degrees, *Far.* On exposure to the sun, on Wednesday, the mercury rose to 114; and, on covering the bulb with black corded silk, to prevent any reflection of the sun's rays, it reached 126.—NOTE, *Ohio Med. Surg. Jour.*, Vol. 1st, p. 577. DR. WATSON, in his practice, says, page 804, *Condie's Ed.*, 1853—"I have alluded to the influence of *hot weather*, in predisposing the system to be affected by the exciting causes of diarrhœa." Again, on the same page, in speaking of the common Cholera of England, he says, "The Chief cause of cholera, such as has now been described, appears to be casual exposure to cold after a continued high temperature of the atmosphere." He is not, in this place, speaking of Epidemic Cholera, it is true; but is Epidemic Cholera any thing but an increased action of the same cause? that produces common Cholera? Dr. Gayley seems to have used Quinine, sometimes in Cholera; but he did it, he says, giving his own words, "during the convalescence." "With several of these, I tried an acidulated solution of Quinia; but the stomach would not tolerate it.—*Amer. Jour. Med. Science.*"

Dr. C. A. Finley, Surg. U. S. A., at Newport Barracks, Ky., in 1847, says, "The treatment, in every case which has occurred since my special report, has been that laid down in that report." The free exhibition of Calomel and Camphor, and the Quinine after reaction was fairly established."—*O. M. S. Jour.* Vol. 2, p. 136.

Now the difference between me and the men above, in using quinine in Cholera, is simply this: I use it to arouse nervous action, and, therefore, to produce reaction, while they would use it incidentally as a tonic to sustain the powers of life, after reaction has taken place. They depend upon Calomel and Camphor in large doses, and I depend upon quinine in full doses, and in collapse in large doses."

Now, are there any forms of disease known as cerebro-spinal affections. That would seem to simulate the derangement, seen in the Cholera? Dr. Stone, of Auburn, Mass., in speaking of *cerebro-spinal meningitis*, in the *Bost. Med. & Surg. Jour.* for April, 1849, in

relation to cases reported, "we should repose some confidence in liberal doses of the Sulphate of Quinine, administered immediately on the development of the disease." This would surely be striking out from the track, if the disease was cerebro-spinal meningitis. May it not, however, have been of the same form of disease as that referred to in the beginning of this paper, under the term spasm or complete insensibility?

In all those cases, the individuals were taken with convulsions. Again, Dr. Robert King Stone, of Washington, D. C., in a letter to the editor of the Boston Medical and Surgical Journal, says:—"The cases of which I speak, were three in number, and confined to colored servants. Before being called to the cases, I had heard of *sudden deaths from perfectly inexplicable causes*. Two of the cases which were my own, occurred in colored boys, between 14 and 18 years of age, and the disease commenced with slight chill and bilious vomiting. Unconsciousness, with convulsions, soon supervened, and the head was strongly thrown backwards, with great tenseness and rigidity of the posterior cervical muscles. * * * * The pulse at the wrist was small, the heart's action rapid and feeble, extremities cold and clammy, and when answers could be obtained, great pain complained of at the *scrobiculus cordis* and *nuchae*. At the moment of seeing the first case, which was a very powerful boy of 18, thus attacked whilst in perfect health, hot baths were prescribed, venesection liberally used, and calomel in full doses. The convulsions ceased for a time under this treatment, though the neck remained rigidly fixed, and as there was apparent periodicity in their returns, I resolved to administer large doses of Quinine, in which resolution I was confirmed by my friend Dr. Witherspoon, U. S. A., who was accustomed to congestive malarial diseases. * * * * In spite of the energetic treatment, the convulsions returned with periodicity, and the head seemed to be thrown still farther back at each access. The Quinine was, therefore, solely relied upon, and in the case of the elder boy, I administered one hundred grains of the sulphate with a goodly quantity of capsicum in twelve hours, whilst in the same period the younger took eighty grains. * * * * It was requisite to revert to the Quinine again on the 2d and 3d mornings, as there was every indication of a return of the alarming symptoms; the quantity required, however, was not more than a dose of fifteen grains on each occasion. * * * * The third case, which I saw with a friend the week afterwards, improved rap-

idly, almost marvellously, under scruple doses of Quinine. * * Several cases were said to have occurred during the same month, and were fatal; in fact two cases were reported to me as having died in the first access. * * * A few weeks after this, Dr. Witherspoon brought me, from the Surgeon General's Office, U. S. A., an extract from the report of a surgeon stationed at a western post, who had seen an unusual number of congestive cases at the *same period*. "These followed generally an attack of intermittent, when the previous symptoms could be learned from the patient, but too often they were brought into the hospital in a state of insensibility, or convulsions, from which they often never roused. And a very peculiar symptom attended most of these cases; a stiffness of the neck, which caused the head to be thrown back, and the convulsions were decidedly of a tetanic character, with a sickening, personal odor, almost intolerable; in all cases where these symptoms existed, the attack proved fatal. Mortality, nine out of eleven. Treatment—*depletion* and opium. *Bleeding* was *inadmissible*, as generally the patient became at once so prostrated that the pulse was scarcely to be felt." I was unable to find whether Quinine had been used in these cases. It is well understood in our region, however, that it is the only remedy in *malarial congestive* diseases, and must be used at once, and decisively. I would refer to the recent work of Fardirou Pathologie Medicale, Paris, 1843, article "Fiebre Intermittente pernicieuse." He describes almost the same symptoms, and denominates the disease as the meningeic or tetanic form of the fever. The treatment is Quinine in large doses. During the last winter, influenza was epidemic, and at the suggestion of some army friends, I was induced to use the same remedy freely.

The administration of fifty grains at the onset, would relieve in a single night the coryza, and unpleasant febrile condition." * *

I should apologize for making so long a quotation, but the matter seemed so apropos to the subject, that I could not well do otherwise. In this letter of Dr. Stone's there are several points brought out that agree fully with the theory laid down by myself in Cholera, the peculiar cerebro spinal action in the convulsions of some of his cases, the pain complained of at the scrobiculus cordis, as in intermitting fever and cholera, the positive proof that quinine will remove the congestion of the vessels, and also the use of quinine in an epidemic that has been frequently noticed to precede or follow Cholera, and evidently dependent on atmospheric changes for its origin, *to wit*: in Influenza.

Now may we not reasonably suppose that the hyperemia, or congestion of the vessels in all these cases, depends upon less of tone in the cerebro spinal system of nerves? In the cases of Cholera that I have treated, I have used from two to ten grains once in ten minutes to once in six or eight hours, often, but not always combined with acetate of morphia from $\frac{1}{2}$ to $\frac{1}{4}$ of a grain. After the disease is controlled, I generally have administered Pill Hg., ten or fifteen grains, and a Seidlitz powder or two—but for the treatment I would refer to my paper on Cholera in the Ohio Medical and Surgical Journal, Vol 5, No. 5.

ART. III. *Reaction, vulgo Fever, from a work on "General Pathology," now in progress.* By Dr. A. DE LESZCZYNSKI.

When a heterologous body has entered the organism, when the latter has sustained any injury, by which the normal proceedings of a part are interrupted, or impeded, then the general organism, by means of its nervous and circulatory apparatus, will endeavor either to assimilate, or to remove the baneful principle out of its jurisdiction, or to repair the sustained damage, or the latter together. The consequence of this endeavor will be "*reaction.*" The *symptoms* of this reaction are called "*fever.*"

Reaction and disease are to me not inseperable ideas. We can conceive disease *without* reaction, but no reaction without an abnormal state of the organism, i. e. *an alteration, a change of organic matter.* The fusion of both into one, has been the cause of sad mistakes, of therapeutical intermeddling, and treating "of things that are not." No one will deny the injurious influences of fallacious doctrines, and how many have been promulgated on the subject *fever.* There were made *idiopathic, symptomatic, and essential* fevers. There are *intermitting, remitting, and continued,* and any quantity of *fevers* of other appellations. Every disease, nearly, was a fever, and nothing but fevers could be seen, and against nothing but *these fevers,* the therapeutical agents were, and partially still are, directed. No wonder, when physiological data, the physiology of the nerves and nervous actions, the influence of irritation upon them and their reaction, the influences they exercise upon the respective organs, were overlooked, that the true nature of a "*fever,*" of its being a number of

symptoms of reaction, was entirely misinterpreted ; no wonder when Eberle says :

“ Like many other things which are at once obvious to the senses, and concerning the existence of which almost every one can decide, *fever* does not admit of a strictly correct and unobjectional *definition* ; since there is not a single symptom which is invariably present, and which can be regarded as absolutely essential to its existence.’

We shall see if this is so. But, if otherwise, let no one suppose I mean to intimate of being the founder of a more rational doctrine ; if anything, I mean to be the zealous promulgator only of more rational doctrines. P. Frank, Schoenlein, Burdach, Valentin, Eisenmann, Mueller, Canstatt, Fuchs, and many others, have preceded me in Europe, (although perhaps their proclamations are uttered in different garbs.) In America, S. Gross, some years ago, said : “ there will be a time when the term *fever* will be obsolete.” This time is ! Shall we drive after a shadow, when we may have reality ? Would the surgeon operate with eyes blindfolded ? If not, why does not the internal Physician throw off the trammels which schools have fastened upon him. The time has passed when, even a *Hufeland*, could say : “ There is only *one* acute disease,—it is fever.”

Organic life consists in an action of an external irritant upon the irritability of an organism. (Irritation and reflex.) It can exist only as long as there exist :

1. *Organic attraction* or organic magnetism, that is, the power of the different structures, in virtue of which they attract only those elements, which are requisite to their individual existence.

2. *Organic equilibrium*, that power, in virtue of which the individual structures, as well as the organism as a unite, expend in proportion to restitution.

3. *Organic periodicity*, that power, in virtue of which the individual structures, as well as the entire organism and certain processes, stand in relation to each other, as regards time. This power might also be called, “ *organic symetry*.”

Every irritation will call forth a change in the organic matter, as well, as a change in the organic functions. An inadequate, that is, a too long continued, or too violent irritation, will cause a too great expense of organic matter, and hence functional disturbance, a disturbance of *organic equilibrium*. Reaction, reflex-action, to react against extraneous powers, entering the organism, or against those

impressions caused by matters originated within, but which, on account of their nature can not be tolerated by the organism, is an innate principle, of the *nervous centres*, which to explain, we will succeed as much, as to explain the nature of electricity, light or elasticity.

By reaction, in its pathological sense, we understood particularly a reflex-action, in which *the entire organism* participates, although the irritation, originally, may have been local. It will be greatest when parts indispensable to the normal condition of the functions have been affected, or such as are of the greatest vital moment. The prime movers in *this*, like in *healthy reaction*, are the nerves. Its perceptible symptoms are called "fever."

Any matter causing abnormal irritation, and which therefore becomes hurtful to the organism, we named in another place, "*a noxiousness*." This, it will be seen, is as relative, as that of "poison."

We have seen that a noxiousness may become hurtful to the organism :

1. By its nature, quantitatively and qualitatively.
2. By its location.
3. By attacking a peculiar individuality, and, that these not only will cause the *force*, but also the *degree* of *disease*. The *degree* of *reaction* will be corresponding with the degree of disease, provided the nature of the noxiousness has not been such, as to revoke the three fundamental laws of organic life, or to exclude their re-establishment.

The position which Eberle, and with him the old school, takes in his description of the general character and etiology of fever, I can not entirely uphold. He says:

"Fever consists in an irritated excitement of the *sanguiferous system*, and is essentially connected with a deranged state of the vital properties of this system.

This *irritated* excitement may be the result of irritating causes acting immediately upon the internal surface of the sanguiferous system ; or of irritating impressions conveyed sympathetically to *this* system, from a primary focus of irritation."

When Eberle, and others, upheld this theory, they undoubtedly overlooked the nervous influence ; they mistook the *result* for the *cause*. The *chief symptom* of reaction, it is true, is an increased vascular action, and in specie, an *increased action of the heart*. This increased activity, as indeed all action, or motion within the body, is

dependent *entirely* upon the *nervous system*. (We remind on the influence of the n. n. vagi upon the heart.)

The second position we find more based upon neurologia, than the former. But when a cause is acting immediately upon the internal surface of the sanguiferous system, or, in other words, upon the nerves of the coats of the blood vessels, then the latter and the heart will not be induced to an increased action before the reigning central nervous organ is in rapport with the seat of the abnormal increased irritation. (The proof of this will be found in the chapter on the nervous system.)

Re-action can be two-fold, *reflected* and *central*. By reflected, or reflective reaction, (fever,) we understand that process of the organism, in virtue of which a disturbance, that is, any abnormal *irritation* is communicated by the *conducting nerves* (cerebral, spinal, or sympathetic,) to the nerves of motion of the heart and muscles of inspiration. This transmission takes place within the central organ of this system, (the superior part of the spinal.) *Reflective reaction*, as indeed all acute local disturbances, is preceded, in most cases, by local symptoms, as pain, functional disturbances, &c., which frequently disappear sooner, than the pathological process has spent itself. For instance, in inflammation we see that the pain ceases after exsudation has taken place.

Central reaction is caused by an abnormal irritation of the *central organs of motion* of the heart and vessels, (*superior part of the spine and ganglia*.) It may be caused by purely local, as well as general causes. Central reaction generally *precedes* local symptoms. An instance is furnished by the different diseases of the blood. By those of them which become local, we observe the symptoms of reaction previous to the symptoms of disease, as in pneumonia, caused by hyperinosis. Here we first observe *re-action*, afterwards local symptoms, whilst in pneumania, proceeding from *local causes*, our observations speak for the opposite.

Prof. C. E. Bock adds to this: "Peripheric re-ation," that is, re-action caused by direct irritation of the motory nerves of the heart, *in their continuation*. But when we reflect upon the fundamental laws of nervous communication, of conduct, and upon the construction of the nerves, upon the multitudinous distribution of their fibres, then we cannot help but see in this, nothing more nor less, but *reflex re-action*. And this we shall not revoke, although we know that acute diseases of the blood will cause the most violent re-

action, whilst purely local diseases are followed only by feeble, and soon passing symptoms of re-action. My creed is, that we have no right to presume a different mode of action in the sympathetic nervous system from any of the others, but that the law of *incidence* and *reflex* here, is quite as binding as there. The violence of re-action in this case, I should rather seek in the attack of the elements of vegetative life.

The character, that is, the *form* of re-action may be double, depending either upon the nature of the noxiousness, or the individual attacked. It is either :

1. *Simple, benign* re-action, *Erethismus*, or
2. Stormy, ardent re-action, *Synocha*.

Many writers add to this a third form, "*the torpid re-action.*" But these same writers affirm that this *torpid re-action* is caused by a supremacy of the noxiousness over the powers of regeneration, in consequence of which the latter cannot re-act. What is the essence of all this? They say there is a re-action, which, on account of the *suppression* of the *power of regeneration*, does not re-act, ergo : *is passive*. A wonderful explanation ! The reason of this said mistake lies, undoubted, in the fact, that these gentlemen compounded *disease* with *re-action*. The form of disease is two-fold, that of re-action only double. As we shall treat of *torsor* separately, we shall now speak of the objectively perceivable form, the image of re-action in general, afterwards of simple and the ardent re-action, in particular.

Symptoms of re-action.—Increased irritability—affection of the sensorium—increased action of the organs of circulation, therefore frequency of respiration abnormally increased contractions of the heart increase of velocity of the circulation, (therefore frequent pulse,) and increased temperature, suppression of the se- and excretions, turgescence and dryness of the epidermis and mucous membranes, thirst. This is the general aspect of every re-action, (fever.) We shall now compare the degrees of re-action :

ERETHISMUS.

SYNOCHA.

PULSE.

Full, frequenter, easily compressible, neither empty nor hard.

Full, very frequent, hard, tender, (in some cases small, thread-like,) and easily compressible; pulsation of arteries, as those of the temporal and carotids, visible.

EXPRESSION OF FEATURES.

Composed.

Painful, restless, eyes sparkling, blood-shot, vessels of the conjunctive bulbi oculi et palpebrarum congested.

SENSORIUM.

Slightly abnormal.

Strongly attacked, commences with violent chills, violent headache, strongest in the occipital region, restlessness, insomnia, delirium, strongly, only painfully increased sensitive feelings of the organs of sense.

REMISSIONS.

Every afternoon very perceptible.

Hardly any.

SKIN.

Not very dry.

Very dry and turgescing.

TEMPERATURE.

Nearly normal.

Highly increased, subjectively and objectively, expiration very hot.

TONGUE.

Moist, slightly furred.

Changeable, very red, sometimes covered with a whitish fur, inclined to dryness.

THIRST.

Not abnormally increased.

Violent, insatiable.

URINE.

Slightly reddened, quantity as usual, or nearly so.

Dark-red, causing pain in the urethra when passing, contains much urea, deposits a precipitate when standing, scanty.

ALVINE EVACUATIONS.

Not entirely suppressed.

Suppressed, hard, of dark color.

Rythmas of reaction.—By rythm, we understand a certain order in which certain actions follow each other. By rythm of pulsation, for instance, we understand that order in which one contraction of the heart follows its predecessor.

Reaction, (the increased action of the power of regeneration against a noxiousness,) is subjected, like in health, to daily rythmical oscillations, and becomes perceptible to us, by an increase or abatement of the enumerated symptoms. A strong guide is afforded by a more slow or rapid circulation, at different times of the day.) Whenever individual life, or as Schoenlien calls it, “the egotistic principle,” is stronger than the noxiousness, reaction will be strongest *in those periods* in which the power of regeneration, *during the normal state*, is in ascendancy, or, in other words, *is most active*. Upon this law *Constatt* rested, when he said, “We have, therefore, a right to be convinced that NOT *the increasing noxiousness, but the PERIODICALLY INCREASING RE-ACTION, causes the daily exacerbations, which particularly return nocturnally.*” Reaction becomes successful in consequence of these exacerbations. The stronger the latter are divided from the remissions, the surer will be the success of the power of regeneration. We meet strongly marked rythm mostly in simple, etheric reaction, wherefore the latter has received the name of “*Remitting Fever.*” In open contrast with this, stands the *Continued Rythm*. Reaction may have been too strong from the very onset, or it may have been simple; but from various causes, as from violence of the noxiousness, or even mal-practice, it is changed into synocha. From this reason, the *ardent reaction* has been named, “*Contingent Fever.*”

Prognosis.—The etheric form of reaction, generally ends good, when not mistaken, and when more left to itself. But when the power of regeneration, by violent interference, or other causes, becomes weakened, then it will change into *torpor*. Again, if the causes of irritation should either increase, or not be removed, it will change into *Synocha*. When this latter is not too violent, and by proper interference of art, it may be led back to the first form.

Should we not succeed in this, then the power of regeneration will be exhausted; the patient dies either during its acme, or, at the best, it will change, like the former, into *torpor*.

It will be necessary for the practitioner to know that a patient has fever;” but this knowledge is by no means *as important*, as we are told. It is true, the symptoms of reaction will call our attention to

the existence of a disturbance on the organism; but they tell us neither the nature, or the seat of it. Moreover, they frequently, if *only* guided by them, will lead us astray, either exaggerating or diminishing the malady, when, perhaps, in the first instance, we ought to *wait*; in the second *act*, and that *quickly*.

We may observe a great many curious and alarming phenomena, during what is generally termed "afever," caused by the motory and sensitive parts, of the cerebral, spinal and sympathetic nervous systems; as spasms, anomalies of secretion and excretions, pain, etc.; we may observe a number of disturbances of the functions of the central nervous organs, as diverse sensations, abnormal perceptions, etc. Therefore, it must be of the greatest import to the physician to distinguish between *fever* and *disease*, between cause and effect. True enough, it is a great deal easier (when attending a patient) to call reaction a disease, and only associate with it a few secondary symptoms, *which we just chance to see*, as pain, or cerebral symptoms, and call it a *rheumatic fever*, or a *nervous typhoid fever*, than to find the cause which produce these symptoms. *Sapientia sat!*

COLUMBUS, O., FEBRUARY, 1854.

ARTICLE IV.—*Hospital Reports*. By J. G. CHAPIN, of *New York Hospital*.

MR. EDITOR: I send you an abstract of some cases of Albuminuria, with microscopic notes of appearances of urine and the treatment pursued.

A German, aged 21, a printer, admitted May 7th, during the attendance of Dr. Swett. The friends of the patient stated that, for the past four days he had been delirious, and most of the time insensible; and that, in addition, there had been almost entire suppression of urine—the past 24 hours having voided 3 oz. It was also stated that he had performed his usual work on the 4th, and this attack appeared early and suddenly the following morning (5th.) On the evening of admission, there was delirium and partial coma—could be aroused, and answered intelligently, but slow and indifferently; the breathing was oppressed, the inspiration long, deep and

sighing. The pupils were natural, but *vision* imperfect—unable to distinguish the small letters of a newspaper. *The skin was dry*, and natural in temperature. The pulse was 70. There was a dropsical ascumulation about the legs, abdomen, face and hands. Prognosis bad. Was directed to receive externally the hot vapor bath, and there was administered internally a mixture of Spts. Minderi, Spts. Nit. Dulc. & Ipecac. every 3 hours during the night. Cupped on the lumbar region.

This treatment was steadily pursued, and the following morning there was a marked relief of the urgent symptoms. The urine was freely discharged during the day to the amount of one pint, which, on examination was found of Sp. Gr. 1010 faintly acid, almost entirely coagulating by nitric acid, and less so by heat.

The Microscope showed, 1. Crystals of uric acid. 2. Fibrinous casts of urinary tubes containing free fat globules and epithelial cells loaded with oil globules—three free cells containing oil.

MAY 9.—Patient had recovered sufficiently to give a history of his case, and stated that three months ago, he first noticed an œdematous swelling of his feet, afterwards extending as detailed above—had not been confined to his bed, and attributes his present attack to exposure at night after drinking freely of wine. The quantity of urine, the last 24 hours, has amounted to 3 pints—the skin is *moist*—the vision is restored.

MAY 25. The diaphoretic treatment has been continued. The quantity of urine, the past week, has been, in pints, 6, 7, 7, 8, 5, 8, 5, of Sp. Gr. 1008. The bowels have become, spontaneously, very much relaxed. The dropsy has been very much relieved.

To-day patient suffered a relapse, attended with dimness of vision, diminished quantity of urine, and increase of dropsy. The treatment was persevered in and continued until his discharge, August 10, with the exception of the month of July, during which he contracted dysentery, and was treated for it. On his departure from the Hospital, there was remaining slight œdema of his feet and face. His urine was examined; it then contained albumen; Sp. Gr. 1014. The microscope showed epithelial cells, free oil globules, and cells containing oil.

CASE II.—An unknown man brought to the Hospital in April, 1852. The people who brought him found him in the street. He was comatose, pulseless, and in a moribund condition. He could be roused with difficulty, but gave no account of himself. There

was some œdema of feet, and his urine drawn from the bladder by a catheter, yielded abundance of albumen. It was about 3 oz. in quantity.

He was treated with diaphoretics and hot air externally; but reaction failed to ensue, and he died the next morning.

The microscope showed the presence of fat globules in epithelial cells. The same was noticed, together with free fat globules, on examining the kidneys after death.

CASE III.—A German, aged 35, a hotel keeper, was admitted Sept. 19, during the attendance of Dr. Bulkley. Patient stated that he had suffered several weeks from obstinate constipation, and neuralgia, pains of legs, induced from exposure to the fumes of a freshly painted room. The characteristic blue line was developed along the gums. He had been directed by his physician to use inunctions of turpentine, which he had steadily persevered in. The day of his admission he began to complain of pain in the head—of drowsiness—dimness of vision—which continued till his admission—was not able to distinguish any object in the ward, and soon not even light. With this there was suppression of urine; the little fluid voided seemed mostly blood. He was cupped over the région of the loins—a sinapism directed. Internally he received spts. wormwood and ipecac, and externally the vapor bath.

On the 20th, the comatose state was well marked, attended at times with a low delirium. The amaueosis continued.

Toward evening the skin began to act freely, and on the 21st there was a bountiful secretion of bloody urine. The vision on the 22d was quite restored. The patient was discharged on the 29th, cured.

This statement is an abstract of the case. The hematuria and suppression of urine seemed clearly traceable to the turpentine.

I will briefly recapitulate the points of interest in the above cases, and I wish to say that the observations as reported have repeatedly been borne out in all the cases of Bright disease the past year in the Hospital.

As will have been observed, the first reported was discharged from the Hospital relieved; the second died; the third possesses much interest in a practical way, though not belonging to the disease under consideration.

The first had enjoyed very fair health till the sudden exposure induced the very critical state in which he was admitted—which was probably the case with the second, from the fact of his sudden insensibility in the street.

On the admission of the three, the symptoms were urgent, and the prognosis extremely unfavorable; the first and third suffered from a complication rarely met with in this disease—amaurosis—depending on the poison from retained urea in the blood. The prompt administration of diaphoretic remedies relieved the first and third patient, but failed in the second.

The microscope showed in the urine the presence of epithelial cells, and of fibrinous casts. The cells contained oil globules, and the casts were filled with cells; there were also free oil globules from cells which were gorged and bursting.

Post mortem examination showed in case second that the kidneys were larger than natural, firm, of pale matted appearance, presenting abundant evidences of fat in the cortical and tubular structure, and in addition was found in the muscular substance of the heart. Probably if the examination had been extended further, it would have been found in the liver and tissues generally.

If any extended observation could establish the fact of its general diffusion throughout the tissues, it ought to go far to show the existence of a great constitutional diathesis, in which there was this deposit, owing either to defective calorification, or to a depraved assimilation of the elements of nutrition. The kidneys take the function of eliminating this matter, and may, long before the presence of albumen, successfully be equal to resist the establishment of this diathesis, if we may infer from the occasional disappearance of the fat, which is observed often in the course of this disease. It is said to be true that a certain amount of fat may exist normally in the urine without evidence of disease; but how little and not constitute a disease, we do not know, but we do know it is expelled at the expense of the glandular epithelium, and its continuance at least should be a source of solicitude with the patient as to its source.

The glandular epithelium, then, may be destroyed, leaving the basement membrane denuded, allowing the transudation of the serous portion of the blood, explaining the continual presence of albumen long after the apparent restoration of the health of the patient; then, again, the part long furnishing the albumen, its own function destroyed from disease, may be absorbed, and a healthy urine be again present; hence by absorption, successive uriniferous tubes, in cases of long duration, we may see a kidney diminished one-half its size. As leading to this result must the continual presence of the cell be suspicious.

The diagnosis of this fatty degeneration, and especially the prognosis, must rest principally with the microscope. The albumen is only a sign, but does not *satisfy* any more than the emaciation of phthisis, though both are present always, either of itself may be fatal to the patient. It comes in the disease to signify often the injury is irreparable—the sign of a great constitutional malady, it manifests itself not *in*, but *at* the kidneys secondarily. But it may in its course develop itself variously, few cases of fatty kidney completing their course without some serious complication.

As a matter of interest, I have collected the statistics of all the cases treated as Albuminuria, including of course those following scarlatina, from the case-books of the hospital. They amount to 77 the past 11 years.

Of this number 32 died, 22 were discharged relieved, or at their own request. Of the 77, the complications occurred in the following order of frequency, though it must be observed that several suffered with a number of affections at the same time :

10 with hypertrophy and valv. disease of heart.

5 with dysentery.

4 with amarousis.

3 with phthisis.

2 with chronic rheumatism.

2 with hydro thorax.

2 with emphysema.

2 with chronic diarrhœa.

39 were free from complication. Of this number 16 died. Of 38 with complications, 16 died, 22 discharged at their own request, or relieved.

Taking in consideration the fact that the result of many cases was unknown, the average duration of the disease was four months and fifteen days, though in many extending over a period of three and five years. The average age was 35; 62 were males—15 females.

The relation between the presence of albuminous urine attended with dropsy, and a peculiar state of the skin, was pointed out by Dr. Osborne, in the Dublin Journal of Med. Science in 1834. The perspiration in many cases was either extinct, or breaking out occasionally on the face and hands. The skin was dry and shining. Dr. O. supposed that suppression of perspiration was the most common

cause of albuminous urine, and stated the following result—"that whenever general perspiration came on, either spontaneously, or by medicinal agents, the case terminated favorably. He proposed that the treatment should be directed so as to secure the healthy function of the skin—to treat in fact all dropsies, independently of the part involved. Of 36 patients treated by him on this plan, three quarters recovered.

Diuretics have been fairly tried, and at this day are constantly being administered. Of 80 patients treated by these measures by Dr. Gregory, 40 died. If the pathology detailed above be the true one, it stands to reason the mortality might be greater. The cell vitality already below par, could not be expected to undergo increased tension, If we ever could infer the propriety of their administration, it would be in those cases where the dropsy proved obstinate, from the blocking up of the uriniferous tubes, which an increase of secretion would wash away. This would always be a delicate point to decide.

The slow destruction of the function of the kidney bears then an important relation to that of the skin, for upon it must depend the elimination of the excrementitious matter of the blood. The skin will assume this office, and if we may infer from the case first detailed, maintain it a long time.

It is liable to sudden suspension, and death may ensue in a very short time, if it is not restored. Most of the cases of sudden coma from this cause have resulted from excess and exposure. Among that class of persons also exposed to the constant changes and extremes of heat and cold, and to the intemperate if happens the mortality is very much greater. Of the 77 patients 26 were seamen and 11 died. The remainder pursued avocations exposing them to out of door weather. It does not follow the disease is peculiar to this class—they the oftener and sooner fall victims.

I have briefly endeavored to illustrate the following points:

I. Microscopical examinations of the urine confirm the view entertained by Dr. Leo Johnson, that true Brights disease is a fatty degeneration of the secreting cells of the kidney.

II. The important connection this disease has with the function of the skin.

III. The importance of resorting to the most prompt diaphoretic means in sudden suppression of the urine.

J. B. C.

PART SECOND.

AMERICAN AND FOREIGN INTELLIGENCE.

ART. I.—*On the Chemistry of Digestion*—BY DR. G. E. DAY.

[Our readers can hardly fail to appreciate the following elaborate review of Professors BIDDER and SCHMIDT's work on "The Digestive Fluids and Metamorphosis of Tissue," and of Dr. CARPENTER's "Food and the Digestive Process," by Dr. G. E. DAY, the esteemed professor of medicine at St. Andrew's. Of the different secretions employed in the digestive process, that of the salivary glands comes natura'ly to be considered first. The principal use of this would appear to be to promote the conversion of the *amylacea* into dextrine, sugar, and lactic acid, and thus promote the absorption of this class of foods.]

The first point we shall notice is the time required for the metamorphosis of starch by human saliva (the mixed secretion.) If we take a fresh decoction of starch, prepared with distilled water, and proved by Trommer's test to be free from sugar, and if we mix it with an equal quantity of fresh saliva, and agitate the mixture, it will instantly lose its viscid character, and become thin and watery; on testing a small quantity of it for starch, we find the iodine no longer induces the well-known reaction, while, on the other hand, the rapid reduction of oxide of copper (in Trommer's test) affords indisputable evidence of the presence of sugar.

The almost instantaneous induction of this action is a point which must not be overlooked, in considering the question whether this is a special property of the saliva, or whether it is shared by other animal fluids. There can be no doubt, as we shall presently show, that in this respect the pancreatic and the intestinal juices exactly coincide with the saliva; but when we find stress laid upon the circumstance that many organic substances—as, for instance, nasal mucous, pieces of kidney, putrefying serum, &c.—produce similar changes in eight or twelve hours, at 100 deg., or upwards, we may

recollect that at such a temperature, and after so long an interval, changes may be spontaneously set up in a solution of starch. There are, however, a number of animal substances which occasion the appearance of sugar in a solution of starch, in so short a period as altogether to exclude, in such cases, the suspicion of spontaneous metamorphosis ; but the action induced by the saliva is incomparably more rapid even than that of any of these substances.

[We may ask, are the secretions of the three sets of salivary glands of equal importance in producing the final result ?]

The following are the two principal conclusions at which Bidder and Schmidt have arrived in connection with these points :

1. They agree with Bernard in regarding the parotids as *glandes aequipares* ; in short, as yielding a secretion which is unquestionably intended to moisten and saturate the dry food, but whose principal object is connected with the general metamorphosis of the fluids within the body, and which is devoid of any marked action of starch.

2. By the union of the submaxillary secretion, and that of the buccal mucous membrane, there is formed that peculiar ferment which almost instantaneously converts starch into sugar. This active principle is not contained in the cells or other solid particles suspended in the saliva ; for the filtered fluid exhibits an undiminished force ; and, indeed, this property is not destroyed when, by the addition of a little alcohol, we precipitate the mucous and (entangled in it) these solid particles.

There is still considerable obscurity and diversity of opinion regarding the question, whether the action of the saliva on starch is continued in the stomach. Jacobowitsch, Frerichs, and Bence Jones believe the metaphoric process is continued in the stomach, and Lehmann and Carpenter support this view, while the experiments of Bidder and Schmidt lead to an opposite result.

[It would appear from these experiments that starch should be rapidly converted into sugar in the stomach ; but in animals, where it has been introduced artificially, the result has afforded a conclusive demonstration that no conversion into sugar takes place in this organ.]

Now, seeing, in the first place, that the formation of sugar commences in the mouth immediately upon the starch coming in contact with the saliva, and further bearing in mind that no sugar can be usually detected in the stomach, it follows that one of two things must occur—either that the newly-formed sugar is at once absorbed,

or that it is converted into lactic acid, and in this form mixes with and is lost in the gastric juice. In the latter case, we must ascribe to the gastric mucous membrane the power of instantaneously converting sugar into lactic acid—a power which, as we learn by experiments, is possessed neither by the stomachs of herbivora or carnivora; in the former case, we can only say, that so rapid an absorption is perhaps the least improbable mode of explanation.

We are bound to remark, that the above opinion of Bidder and Schmidt, regarding the absence of sugar in the gastric contents of animals fed upon starch, has not met with universal acceptance. It is true that it is in accordance with views previously expressed by Blondlot, and by Bouchardat and Sandras, but it is opposed to the results obtained by Frerichs (who “in at least fifty experiments” constantly found sugar in the filtered contents of the stomachs of men, carnivorous and omnivorous mammalia, and birds,) and to those of Jacobowitsch.

The secretion of the *glandular apparatus* imbedded in and forming the chief bulk of the mucous coat of the *stomach*, next claims our attention. Many of our best recent observers (amongst whom we may especially mention Hubbenet, a pupil of Bidder and Schmidt's) believe that two perfectly distinct secretions are found in the stomach—namely, the true *gastric juice* and *gastric mucous*. Almost all observers since Beaumont, have agreed in describing the former as a clear aqueous or only slightly viscid fluid, with a strong acid reaction, and devoid of morphological elements—that is to say, of *essential* morphological elements; for on a microscopic examination, a few solid particles, consisting partly of unchanged cells of the gastric glands, partly of the nuclei of these cells, and partly of fine molecular matter, which is produced by the disintegration of these elements, may usually be observed; it is only secreted during the period when digestion is actually going on, and it is this fluid alone which possesses any true digestive power. All that is known of the latter (the mucous) is, that it accumulates in the empty stomach, that it is neutral (unless when slightly alkaline from the commixture of saliva,) and that it exerts no solvent action on the protein compounds. Frerichs, however, whose views on the Chemistry of Digestion are entitled to the highest respect, holds a different view, and maintains that at the commencement of each act of digestion, the round cells in the interior of the glands escape in excessive quantities, and form a stratum of about a line in thickness, which has hitherto been regard-

ed as mucous, and which either invests the interior of the stomach, or surrounds the contents in the form of a white membrane, the latter being especially the case when dry food is taken. The gastric cells become gradually disintegrated during the continuance of the digestive process, and thus afford a continuous source of pepsin or ferment. The digestive act being accomplished, the gastric glands collapse, and in that state no nuclei or cells, and only a few scattered granules, escape from them. During abstinence from food, the morphological elements are again perfectly formed, and the tubes become filled with cells, which probably in very prolonged fasting again become disintegrated.

There are two points in connexion with the secretions of the gastric mucous membrane to which Kölliker has directed special attention, and which we will now lay in a condensed form before our readers.

The first is, that *in many of the mammalia the gastric mucous membrane is covered with a more or less thick coat of mucus during digestion.* This fact was originally noticed by Eberle in the stomachs of rabbits, and he clearly regarded the mucous as essential to digestion.

[The gastric mucus can hardly be regarded as essential to the digestive process, except that it may possibly exert a peculiar influence in certain parts of the stomach. The gastric juice is acid, unless there be an excess of mucus, when it may be neutral, or when a large quantity of saliva is swallowed, when it may be alkaline. It contains a free acid, a highly nitrogenized matter, termed "pepsin," or, more recently styled, "ferment substance." It is perfectly astonishing how enormous have been the labours of these indefatigable labourers, M. M. Bidder and Schmidt. They have recorded no less than 45 series of experimental inquiries, embracing 140 individual experiments.]

Their experiments lead to the following conclusions :

The admixture of saliva with the gastric juice is of no service, in so far as the solution of albuminous bodies is concerned. It appears, that in experiments with gastric juice containing saliva, the number expressing the dissolved per centage of dry albumen was not so high as in corresponding experiments (both sets of experiments being made within the stomachs of dogs) when the saliva was excluded. Whilst in the latter the averages of nine experiments of two hours', nine of four hours', and nine of six hours' duration were 29, 62, and 76 per cent., in the former they were only 26, 45, and 65 per cent.

This difference is unquestionably dependent upon the partial neutralization of the free acid of the gastric juice by the saliva.

Both classes of experiments agree in showing that the acid gastric juice possesses a specific and peculiar power of dissolving coagulated albumen ; and if this solution proceeds with more rapidity in the stomach than externally to the organism, the reason is, that in the former the albumen is kept in constant motion, and is being always brought into contact with fresh quantities of gastric juice. Several of Bidder and Schmidt's experiments show, that provided a sufficient quantity of pepsin be present, the digestive power of the gastric juice varies in a direct ratio with the amount of free acid that it contains. That the solvent power of the gastric juice is not solely due to the presence of hydro-chloric acid is, however, evident from the results of several experiments, which showed that this acid, in a diluted state, could only, at the most, exert one-fourth part of the solvent action on coagulated albumen which was exerted by the gastric juice itself. The neutral or alkaline gastric mucous of fasting animals dissolved only very slight quantities of albumen, but on adding hydrochloric acid, the activity of the fluid was at once augmented. On neutralizing the free acid of the gastric juice with potash, its digestive power is destroyed.

With regard to the effects of filtration, they observe that repeated experiments have convinced them that gastric juice from which all undissolved organic matters have been separated acts with the same efficiency as that which has not been filtered. This is obviously at variance with the view held by Frerichs, that new ferment continues to be developed from the cells contained in the gastric juice by the action of the free acid.

The experiments on concentrated and diluted gastric juice led to no definite result ; indeed, no experiments seem to have been made with the concentrated fluid till it had been re-diluted with water.

It was proved by several experiments that the solvent action of the gastric juice is destroyed by rapid ebullition, or by evaporation at a boiling heat—an additional illustration of the well-known fact, that ferments are decomposed at an elevated temperature. This may possibly be the basis of the universally recognized dietetic rule, which declares all very hot foods or drinks to be injurious. On the other hand, the solidification of the gastric juice by artificial cold did not destroy its solvent powers—a circumstance which may be consolatory to those who are addicted to ices.

It was distinctly shown by three experiments, that the admixture of bile with the gastric juice—even when the quantity is so small that the mixture retains a distinctly acid reaction—completely destroys the solvent power of the latter secretion upon coagulated albumen.

The quantity of the gastric juice secreted in twenty-four hours was determined by Bidder and Schmidt, in the case of dogs, to be about one-tenth of the whole weight of the body. Assuming the same ratio to be true for men, a man of ordinary weight (say from ten to twelve stone) would daily secrete no less than from *fourteen to about seventeen pounds of this fluid*. This is a very different estimate from that formed by Lehmann, whose calculations were based on the following data :

100 grammes of the fresh gastric juice of a dog cannot, according to Lehmann's experiments, effect the solution of more than five grammes of coagulated albumen (calculated as dry.)

An adult man receives into the stomach about 100 grammes of dry albuminous matter in twenty-four hours.

Hence, to digest this quantity, there must be secreted 2,000 grammes, or four pounds of gastric juice.

We now proceed to the consideration of the *bile*—a subject to which Bidder and Schmidt have devoted much experimental labor.

The first question they consider is the following:—Is the bile to be regarded simply as an excretion? This point they have attempted to decide by observations on dogs in whom biliary fistulæ had been established.

A dog on whom this operation was performed, lost two-fifths of its weight in thirty-four days, although its appetite was increased rather than diminished. The emaciation was especially marked both in the loss of fat and muscle. The hair fell off at many spots, or was loosened by the slightest touch. Digestion appeared to go on in an undisturbed manner, although the animal was in the habit of licking the bile as it escaped. The excrements had a greyish-yellow, and sometimes a partially green color; but during the last few days of life, regained their normal color and odor. There were constant eructations of a bad odor, and the breath likewise had a very unpleasant smell. The urine was occasionally so concentrated, that its specific gravity was 1.050. The animal at length (on the thirty-fourth day) died from general exhaustion. Dissection showed that a minute new ductus choledochus had become formed, probably be-

tween the twenty-first and twenty-fifth day after the operation, at which time the fistulous opening presented a tendency to contract. The right half of the stomach presented numerous ecchymoses, both of older and of more recent standing, although there were no symptoms of disturbed gastric digestion during life—that is to say, there was no vomiting, and the appetite continued unimpaired. The rest of the intestinal tract presented nothing abnormal, except that it was of a somewhat deeper red tint than usual.

A second dog, similarly treated, did not present a voracious appetite, or exhibit the same amount of flatulence, or such a tendency to putrefactive decomposition as the former animal; but in the course of twenty-seven days (when it died) it had lost about one-half of its weight. Except that the fat and the muscles had almost disappeared, none of the organs were found to present any marked peculiarity.

Since the quantity of bile that escaped from the system in these two cases was not compensated for by the additional food that was taken, the idea suggested itself that the emaciation and the disturbed condition of the metamorphosis going on within the tissues might be due to the continuous drain upon the system. This view was confirmed by the two following experiments, in which this disturbing cause was eliminated:

A dog, whose spleen had been extirpated, and in whom a biliary fistula had been established fourteen days afterwards, took such large quantities of food as more than to compensate for what was lost by the escape of bile. Its bodily weight, under these circumstances, did not materially diminish during the space of two months, at the end of which it was killed. The normal development and power of the muscles were retained, but the fat had gradually disappeared. Putrefactive decomposition of the excrements, and abundant flatus of a disgusting odor, were likewise observed in this case.

A very emaciated dog, whose spleen had not been extirpated, and in whom a biliary fistula had been established, regained its healthy appearance and its previous normal weight nineteen days after the operation. During this period it took more meat and bread than were requisite for it in its perfectly healthy condition. The ductus choledochus subsequently became re-established, and the weight then again materially increased.

From these experiments, it seems clear that the question which they attempt to solve cannot be directly and positively answered ei-

ther in the affirmative or negative. By an artificial interference with the organism (by the establishment of a biliary fistula) the bile may be reduced, in a certain sense, to the condition of an excretion, if the loss thus occasioned to the system at large can be suitably covered. If this compensation be impossible, the derivation of the bile from the intestinal canal and its direct external discharge in a comparatively short time, induce fatal emaciation and debility. For the full comprehension of the question in all its bearings, we should know the quantity of bile secreted in a given time, and the average amount of solid constituents which it contains, the share which it takes in the process of digestion, the changes which it undergoes during and after its resorption into the blood, and lastly, the form in which it is finally eliminated from the organism.

In the strict sense of the word, we can hardly regard the bile as a digestive fluid. There is no special class of substances whose solution is dependent upon it. If, as certain experiments show, animals with biliary fistula can live even for years, the function of this fluid in digestion must, at all events, be a limited, and probably only an indirect one; and this is confirmed by the fact, that the secretion of bile does not attain its maximum till twelve or fifteen hours after food has been taken, when by far the greatest part of the ingesta must have passed beyond the duodenum; hence the greatest part of this fluid enters the small intestine at much too late a period to exert in it any great influence on the metamorphosis of the chyme.

[From trials upon various animals, it has been ascertained that although the *pancreatic juice* exerts no solvent action in albuminous bodies, it yet acts with extreme power in converting starch into dextrine and sugar.]

Bernard, about four years ago, discovered that remarkable fact, that, externally to the organism, the pancreatic juice possesses the property of decomposing the neutral fats into their base and acid.

The only unquestionable action of the pancreatic fluid, is that which it exerts on starch; but since the relative size of the pancreas is greater in carnivorous than in herbivorous animals (the weight of this gland being one-three-hundredth that of the whole body in dogs and cats, and only one-six-hundredth in that of rabbits,) and since, further (as has been shown by Bidder and Schmidt's experiments,) the greater part of the amylaceous food of the sheep is converted into sugar before it enters the duodenum, we may fairly conclude that the principal uses of this secretion are still unknown.

There are far greater difficulties in obtaining pure *intestinal juice*, than in procuring any of the secretions we have previously considered. The most recent investigations on this subject, are those of Frerichs, contained in his article on Digestion, and of Zander, a pupil of Bidder and Schmidt's, who have themselves continued and extended his researches, and their conclusions are, upon the whole, very discordant.

All that we can say with certainty with regard to the physico-chemical properties of the fluid is, that after filtration it is a tenacious, ropy, colorless, and strongly alkaline substance.

According to Frerichs, the intestinal juice exerts no change on any of the ordinary elements of food. Protein bodies and gelatinous substances remained perfectly unchanged; fat became disintegrated in the same manner as in all other viscid fluids; neither, according to Frerichs, does it exert any special action on starch. Hence he denies to the intestinal fluid any action as a direct digestive agent. Lehmann, on the other hand, found that the intestinal juice possessed, in a high degree, the power of converting starch into sugar; but protein bodies and fats were so little affected by it, that he doubts whether it exerts any digestive action on these substances, and the more so, since cubes of coagulated albumen and pieces of flesh, when introduced into the gut of a hospital patient through a fistulous opening, were expelled from the rectum almost entirely unchanged. The fistula was, however, in the lower part of the ileum, and probably near the cæcum. Finally, the results of experiments on nineteen cats and two dogs have convinced Zander and Bidder and Schmidt, that the intestinal juice exerts a solvent action on albuminous bodies, scarcely inferior to that of the gastric juice, and a sugar-forming power on starch scarcely inferior to that of saliva or of pancreatic juice.—*Brit. and For. Med.-Chir. Review*, July, 1853, p. 171.

ART. II.—*Organic Chemistry.*

CRYSTALLIZATION OF THE BLOOD.—A new and very interesting subject has lately been more formally brought before the profession; we refer to the fact of the production from the blood in certain circumstances, of red "albuminous crystals," which though formed of animal matter, and sometimes, in all probability, during life, have yet forms as regular as any inorganic crystals. An excellent epitome

of the facts bearing upon this matter has been published in the *Medico-Chirurgical Review* for October, from which we select as much as appears calculated to be interesting to the majority of our readers.

It has been hitherto held to be the rule, that crystallization is peculiarly a property of inorganic chemistry, and that crystalline forms are met with in the animal economy only when the material giving rise to them has lost all claim to be considered as an integral part of the living tissues. The discovery of the crystallizing power of the albuminous elements of red blood (*hematoidin* of Virchow,) has, however, made it probable that there are exceptions to this general law.

Various authors, as Sir E. Home, Scherer, etc., had described reddish crystals in blood which had been effused into tissues or organs; but Virchow was the first who paid particular attention to their actual nature, as different from saline or earthy crystals. He considers that the formation of these red crystals is the terminal step of the transformation of the coloring matter of the blood, which, first diffused, passes into the granular, then into the crystalline form; the crystals being yellowish or red, of a rhomboidal form, occasionally as large as the ordinary triple phosphate crystals in the urine, and forming spontaneously in extravasated blood, in the course of from a fortnight to three weeks after its escape from the vessels. Virchow concludes that the crystallizing process may take place—1, in the cells; 2, in amorphous protein substances (in both cases from diffused coloring matter;) or 3, from agglomerated and subsequently metamorphosed blood-corpuscles; that the crystallizing power is inherent in the albuminous matter or protein; and that the coloring matter in the crystals bears no other relation to them than the metallic colors impregnating its crystals do to quartz. Reichert comes to similar conclusions; that the crystals are albuminous, and that the coloring matter is not an essential feature. Kölliker has advanced another step in this investigation, having detected the crystals in *the interior of unbroken blood-corpuscles*. In the blood of a dog's liver, he found a great number of blood-globules, containing from one to five rodlets of a dark yellow color; and, in unchanged corpuscles, from the splenic blood, the gradual formation of one or two of the crystals could be followed. Dr. Funke introduces the matter under yet a new aspect; he has succeeded in forming the crystals from the blood. If we add water to a drop of blood spread out upon the object-glass of the microscope, when the drop has just

began to dry up, the edges of the heaps of blood-corpuscles are seen to undergo a sudden change. A few corpuscles disappear, others receive dark thick edges, become angular and elongated, and are extended into small, well-defined rodlets. In this manner, an enormous quantity of crystal embryos are formed, which are too small to enable us to determine their shape; they rapidly extend more and more lengthways, the entire field of vision being gradually covered with a dense network of acicular crystals crossing one another in every direction, other crystals presenting the form of rhombic plates.

The colored rhomboidal crystals, however, as originally described by Virchow, do not appear to be capable of being artificially formed.

Such, we think, is a correct, though brief statement of the principal facts on this very interesting subject.

On referring to the drawings of some of the principal forms which we have already described, we think no one can fail to be struck with their great resemblance to the various crystalline forms found in the urine, uric acid, oxalate of lime, triple phosphate, nay, even cystine. Had we been shown the drawings without being told of their origin, we should at once have set them down as illustrations of the crystalline urinary deposits.—*Asso. Med. Journal*, Nov. 13, 1853.

MILK, AND ITS CONSTITUENTS.—This secretion has not met with that amount of attention, lately, that its importance, and the means for investigation now at the command of the physiological chemist, would seem to invite. Before noting, however, what has recently been done in this division of organic chemistry, it may not be amiss to detail a few of the accepted facts respecting this liquid, since these may lead to a readier comprehension of what will follow.

First, then, as to colostrum, and the distinction between it and milk; in colostrum, there is not merely an increase in the amount of the saline constituents to twice or thrice of that existing in healthy milk, nor a general augmentation of the solid constituents only, in the ratio of about $17\frac{1}{4}$ to 11, and which is, according to Simon, principally due to the increased quantity of sugar, although this point is not absolutely determined; but the difference mainly depends on the presence of granular masses, termed *colostrum corpuscles*, which are invariably present in the colostrum, but disappear, as a rule, in three or four days after delivery, being apt to re-appear on the supervention of any acute disease. These colostrum corpus-

cles are much larger than the true fatty milk globules, and consist of small fat globules imbedded in an albuminous substance ; whilst, as they exist in larger quantity in the colostrum, than the milk globules do in healthy milk, the former secretion is really richer, than milk is, in fat.

In healthy milk the amount of butter varies according to circumstances, but appears to average nearly $3\frac{1}{2}$ per cent. ; this butter is considered to be richer in olein than the butter from cow's milk. The valuable observation of Simon may be remembered by some, that the butter undergoes no appreciable change in amount during suckling, but that the milk-sugar diminishes with the growth of the child ; whilst the proportion both of the casein and the saline constituents are augmented. L'Heritier formerly detailed some singular analyses of the milk from two women, both twenty-two years old, one dark, the other fair, from which it appears that not only the quantity of butter, but of almost all the other constituents also, was nearly doubled in the milk of the *brunette*; this assertion is well worthy of a farther investigation to support or confute so singular a statement. In ordinary cases, milk contains about $3\frac{1}{2}$ per cent. of casein, and 4 to 6 per cent. of sugar ; one peculiarity about the casein being, that it is less readily coagulated by acids than that from cows' milk. The above remarks apply especially to human milk.

The existence of albumen, or an analogous form of free casein coagulable by heat, in healthy milk, is disputed by M. Lieberkuhn, who has recently investigated this subject as well as the relations of casein and albumen to potash. He finds that when albuminate of potash is gently evaporated on a water-bath, it gradually decomposes into potash, and albumen in an insoluble state ; and that the corresponding potash compound from milk, by a similar treatment, undergoes a similar decomposition, separating into alkali and an insoluble skin of casein. With perfectly fresh milk the results are precisely similar, the coagulum being insoluble in boiling water. The substance noticed by Scherer, existing in milk, susceptible of coagulation, and having an albuminous reaction, is not only obtained by adding excess of lactic or acetic acids to milk, and heating the filtrate, but also from the filtered liquor of boiled milk similarly acidified. Boiled milk, when evaporated, as well as fresh milk, when concentrated at a temperature of 104° F., and the residuum treated with cold water in both cases, yields a liquid which coagulates on boiling. From these conditions, M. Lieberkuhn contends that milk

contains neither albumen, nor free casein analogous to it, coagulable by heat. This chemist farther observes that the nitrogenous substance contained in fresh milk exists under three distinct forms; one corresponding to albuminate of potash, another coagulable by heat, and a third separable from the serum by filtration. He also points to the probable identity of albumen and casein, but abstains from the avowal of any decided opinion on this point.

In addition to the chlorides of sodium and potassium, the alkaline and earthy phosphates, (bone earth,) and the alkali combined with the casein in milk, Dr. G. Wilson, pursuing the track of some experiments of Mr. Middleton on the constant presence of fluorine in bones, recognized, some two or three years since, the existence of this element in cow's milk, cheese, and whey, existing probably as fluoride of calcium. We do not *know* that it is present in human milk, nor are we aware that experiment has yet shown that this, although most probable, is an actual and ascertained fact. Fibrin, hæmatin, urea, etc., have been recognized in milk; but these are the products of disease, and cannot be reckoned among its constituents.—*Asso. Med. Journal*, Oct. 28, 1853.

INFUSORIA IN WOMAN'S MILK, BY DR. VOGEL.—No general directions can be given as to whether a woman may suckle or not. In every case the question must be determined by an examination of the milk; and here the microscope proves eminently useful. The author found in that milk which produced sickness in the child, and destroyed the health of the mother after prolonged lactation, immediately after its removal from the breast, infusoria similar to those found in the incrustations upon the teeth (*vibrio bacillus*.) Such vibriones are found especially in women who menstruate or suffer from hemorrhages during this period, the good or bad aspect giving no important indication. The milk has often a fine thick white color, or is of paler hue; its consistence may be either thick or watery; its reaction is often alkaline, but generally neutral. Under the microscope it exhibits, according to its richness, sometimes but few, at other times many, milk and cream corpuscles; these differ from the corpuscles of healthy milk by their pale yellow color, their want of metallic lustre, and their speedy decomposition. As regards the infusoria, they are little rod-shaped bodies, dark in the middle, surrounded by a lighter line, but exhibiting neither head nor tail under a magnifying power of 600 diameters; there are, however, feet in

great number and of considerable length. The movement of these animalcules was swimming, and occasionally it was very active. Forward movement was worm-like, and an annular structure of four rings was observed. Mostly they twist, screw-like, upon their axes. When they swim in a circle, they always move from right to left. The length 1-100 mmtr., their breath four times less. They are best seen when the milk is diluted with water. In ammonia, diluted acids (even the lactic,) they die immediately.

Children fed upon milk containing these infusoria, become sooner or later attacked by diarrhoea, and the evacuations are of a green color. This condition disappears as soon as healthy cow's milk is substituted. The author believes that this effect does not proceed from the infusoria as such, but from the same cause which produces the infusoria, namely, a process of fermentation in the milk itself. The ferment is, according to him, the congested and increased heat in the breasts, connected with the general excitement of the sexual system.

But a fermentation as Jul. Clarus observes, cannot be present, because the author always found the milk alkaline or neutral, and never sour. Were there fermentation, the evolution of lactic acid would, upon the author's own showing, have immediately destroyed the infusoria.—*Med. Times and Gaz.* Nov. 19, 1853, from *Schmidt's Jahrb.* 1853.

COLOR OF THE URINE—"I imagine," says Prof. J. Vogel, of Giessen, "that the coloring matter of the urine is formed by the coloring matter of the blood, and that it consists of a decomposition of blood-disks. If this be the case, and it be premised that the decomposed blood-disks do not leave the body through any other channel than the urinary, it follows that we possess, in the color of the urine, a ready means of ascertaining, in a given time, whether a large or a small quantity of blood-disks are decomposed in the animal economy. In the normal condition, two to six parts of coloring matter are voided daily, and this expresses the normal loss and reproduction of blood-disks. A chlorotic patient, or a convalescent, who voids but little coloring matter in the urine, would have but little change and reproduction of blood-disks. Every one whose urine is high colored would require a constant supply of red blood-corpuscles. The grounds upon which this hypothesis rest are the following :

“I. In all cases of brown or brownish-black urine, where the urine is most colored, the direct source of the coloring matter, namely, from decomposed blood-disks, can be easily traced.

“II. In all cases where there is a constant discharge of red urine with increase of the coloring matter, as in fevers, inflammation, etc., there we see, as a common result, diminution in the quantity of the blood-corpuscles, and a corresponding condition of anæmia.

“III. In cases where there is noticed diminution in the production of red blood-corpuscles, with probability of their very sparing disintegration, as in many (not all) cases of anæmia and chlorosis, there do we find diminution in the excretions of the coloring matter of the urine.”—*Med. Times and Gaz.*, Oct. 8, 1853, from *Vogel and Nasse's Archiv.*

ART. III. — *On the Physiology and Disease of the Pancreas*—By
DR. BRIGHT AND M. BERNARD.

[In 1832, three papers were read successively before the Medico-Chirurgical Society on this obscure but interesting subject; the authors being Dr. Bright, Mr. Lloyd, and Dr. Elliotson. These gentlemen directed attention to a peculiar and rare symptom.]

“The symptoms to which I refer,” said Dr. Bright, who was the author of the first communication, “is a peculiar condition of the *alvine evacuation*; a portion more or less considerable assuming the character of an oily substance resembling fat, which either passes separately from the bowels, or soon divides itself from the general mass, and lies upon the surface, sometimes forming a thick crust, particularly about the edges of the vessel, if the *fæces* are of a semi-fluid consistence; sometimes floating like globules of tallow which have melted and become cold; and sometimes assuming the form of a thin fatty pellicle over the whole, or over the fluid parts in which the more solid figured *fæces* are deposited. This oily matter has generally a slight yellow tinge, and a most disgustingly *foetid* odor.”

The importance of Dr. Bright's views, as bearing upon recent investigations, will be seen in the following summary of them. He says:—

“When we draw a comparison between the three foregoing cases, a very close analogy, or even identity, in many circumstances, may be traced. In all of them chronic ailment terminated, sooner or

later, in jaundice ; and in all of them a great peculiarity in the character of the dejections existed. In the result of the examination after death, we have likewise some circumstances which coincide in all—*obstructed biliary ducts ; the liver gorged with bile ; fungoid disease attacking the head of the pancreas ; and malignant ulceration on the surface of the duodenum.* The question to be solved is, upon which of the conditions indicated or caused by these morbid changes, if upon either, the peculiarity of the evacuations depended ? That the obstruction of the biliary ducts, or even the total absence of all indication of biliary secretion, is not usually attended by the same peculiarity in the evacuations, many cases which have been cautiously detailed by various authors, and many which we have all observed, bear sufficient testimony ; and I was therefore induced to ascribe it either to the existence of malignant disease, or to that disease being situated in the pancreas. That the simple fact of malignant disease existing, is not *necessarily* productive of such appearances in the feculent matter, I infer from cases both of that form of disease and of melanosis in the liver to a very great extent being, within the scope of my experience, unaccompanied by any such discharge, though the evacuations were submitted to the most rigid observation. That simple ulceration in the bowels, to any known extent, is not attended by any such symptom, I am led to believe, from knowing that neither in the most extensive ulceration of the large intestines in cases of dysentery, nor in the worst cases of ulceration of the small intestines in fever, in diarrhoea, or in phthisis, does anything of the kind usually occur. Whether, however, malignant ulceration of the mucous membrane is accompanied by this symptom, I cannot assert, though I have often seen most extensive ulcers of the pylorus and of the rectum, where, although the evacuations were attentively observed, such fatty matter was not detected. As, however, a malignant ulceration of the membrane did exist in each of the foregoing cases, it is not impossible that this was the cause of this symptom ; but we must bear in mind that such ulcerations are *by no means* uncommon, and that the phenomenon of which I am speaking is uncommon ; and that in each of the cases it was accompanied by another morbid appearance, which is not common—namely, the malignant disease of the pancreas. The fact of the intestinal ulceration having, in each case, occupied the duodenum, does, however, somewhat diminish the weight of this observation, for that certainly is not so frequent an occurrence.”—*Brit. and For. Medico-Chir. Review, July, 1853, p. 154.*

ART. IV.—*On Excision of the Knee-Joint*.—BY R. J. MACKENZIE, Esq.

[Not only has an unfavorable impression been produced against this operation, but severe censures have also been passed upon the operators. Mr. Park, of Liverpool, in 1783, first prominently noticed the operation, but it had previously been performed successfully by Mr. Filkin of Northwich. After these, Moreau operated in three cases, two of which were fatal. In 1809, Mùlder operated upon a pregnant female—she died some months after from tetanus.]

The next notice of the operation is by Mr. Crampton, in 1823. The operation in Mr. Crampton's first case can scarcely be said to bear on the question of excision of the knee-joint; not only were the patella and part of the tibia removed, but upwards of six inches of the thigh bone were taken away. The patient, however, lived upwards of three years after the operation, and then died from phthisis. Mr. Crampton, in his remarks on the case, says, that it "was one to which the operation of excision was not applicable." The disease had proceeded too far; for, even had it been possible to have removed the whole of the diseased bone, and that union had taken place between the femur and tibia, the limb, from its shortness, would have been useless. The operation was performed in the same year, in a second case by Mr. Crampton. The girl, although a most unmanageable patient, made an excellent recovery. Six months after the operation, the femur and tibia were consolidated by a firm bony union. Eight months later, she is reported as being able to walk a distance of nearly five miles at once; and upwards of three years after the operation, Mr. Crampton says:—"I have examined the limb, and find that the femur and tibia are firmly consolidated; the leg and thigh are not in the slightest degree wasted, but the limb is considerably bowed outwards; she wears a shoe with a cork sole four inches thick; and, to use her own expression, 'is able to stand or walk the length of a day.'"

The operation was next performed by Mr. Syme, who, in 1829 and 1830, excised the knee-joints of two children, of seven and eight years of age. Up to this time the operation had only been performed in adults. The result in the second case was unsuccessful, the child having died about ten days after the performance of the operation. Writing in 1831, Mr. Syme gives the following sat-

isfactory account of his first case :—" In the course of four weeks after the operation, the wound was all but healed, and the limb, before the expiration of three months, had regained so much strength, that the patient could make some use of it in walking. It has been progressively improving since, and is still doing well. I have no doubt that ultimately it will be nearly as useful to him as ever ; but even at present he would be very sorry to exchange it for a wooden one. He can walk and run, though with a halt, without the constrained appearance of a person with an artificial leg, and merely requires the *heel* of the shoe to be two inches higher than the other. The limb is stout and well nourished, and though slightly bowed outwards, does not occasion any disagreeable deformity ; it allows a slight degree of flexion and extension." Seventeen years later, however, a much less satisfactory account of the same patient is given. In speaking of excision of the knee-joint, in 1848, Mr. Syme says :—" I tried the operation nearly twenty years ago on a boy, who recovered perfectly from it, and seemed at first to possess a limb little inferior to its fellow, except in so far as it was stiff at the knee. But in the course of time it was found that the growth of the two limbs was not equal, and that the one which had been the subject of operation gradually diminished in respective length, until it wanted several inches of reaching the ground, when the patient stood erect."

After Mr. Syme's experience in 1830, the operation seems, as far as I can ascertain, to have been abandoned till within the last three years. The results of the operation on the whole had been decidedly unsatisfactory.

In 1850, the operation was revived by Mr. Fergusson ; and within the last three years, the operation has, as far as I can ascertain, been performed thirteen times : in three cases by Mr. Fergusson, in six cases by Mr. Jones of the Island of Jersey, in one case by Mr. Page of Carlisle, in one case by Dr. H. Stewart of Belfast, and in two cases by myself. Of the results of these cases, I shall give some details immediately. Of the thirteen three have died, two directly from the effects of the operation, and one from dysentery. The remaining ten are, as far as I know, at present alive. In five the limb is already used freely in progression ; in one the result, as regards the usefulness of the limb, is yet uncertain ; in one, I am ignorant as to the result ; in the remaining three, sufficient time has not yet elapsed to render the result certain, but of each, the most favorable expectations may be entertained.

Such is a brief outline of the history of all the cases in which, as far as I can ascertain, the operation has hitherto been performed, and I think I am justified in saying, that an impartial review of these cases, especially of the later series, at least proves that the propriety of the operation is yet an open question.

[Dr. Mackenzie, after cursorily examining the cases of this operation occurring within the last three years, proceeds to defend those who have been censured for reviving the operation. He says :]

The propriety of attempting to save a limb by excision of the knee-joint, seems to depend on the three following considerations:—
1st. Is the operation of excision attended by greater or less danger to life than amputation of the thigh? 2d. In the event of recovery after excision of the knee-joint, is the limb more or less useful and seemly than a wooden leg? 3d. Does the long confinement to the horizontal posture, which is necessary after excision of the knee-joint, in any measure counterbalance the benefits of the operation (if such benefits are proved) as compared with amputation of the limb?

A careful consideration of these questions, and of the recorded results of the operation, led me several years ago to doubt the propriety of the operation having been rejected from surgical practice. I satisfied myself, by repeated trials on the dead body, that the operation could be performed without difficulty, and without the risk of wounding any important parts; and, as a teacher of surgery, I have been in the habit of mentioning to my pupils, my impression, that the operation had been rejected from practice on insufficient grounds. Knowing, however, the objection of my hospital colleagues to the operation, I never requested their sanction in carrying it into execution, till the late experience of Mr. Fergusson and Mr. Jones appeared to me to warrant my urging the question more closely on their attention, and my performing the operation in the cases which I have related.

With regard to the considerations which I have suggested as principally bearing on the merits of the operation, I would submit,—
1st. That the danger of the operation may be reasonably expected to be less than that attending amputation of the thigh. The wound necessary for the removal of the diseased bones is less extensive than the wound of amputation of the thigh, whether performed by the circular or flat operation. The large vessels and nerves are not divided in the operation, the parts involved in the incisions being

principally the integuments and ligamentous apparatus of the joint ; the medullary canal of the bone is not laid open, a point which has of late years been suggested as of some consequence in diminishing the dangers of amputation ; the shock, which always attends, to a greater or less degree, the sudden removal of a large part of the body, is avoided.

Time and experience, however, can alone determine the comparative danger of the two operations. In the mean time, the results of the limited number of cases in which the operation has been recently practised, prove, as far as they go, that the danger to life is not great ; and, unless some unforeseen accident should occur to the cases which are at present in progress of convalescence, that the danger is inferior to that of amputation.

2nd. With regard to the usefulness and the seemliness of the limb, I need only refer to the account I have given of the results of the operation in Mr. Jones's hands, to show that the limb may retain a degree of usefulness which can never be attained by the wooden leg in common use, nor yet by the most expensive and efficient artificial limb which I have ever seen ; and if, in the days of Mr. Park, such a result could be obtained as that a man, whose knee-joint had been excised, could run up the rigging and perform all the duties of a seaman, surely, with all the resources of modern surgery, we ought to obtain an equally satisfactory result now.

3rd. The remaining objection to the operation is the tediousness of the convalescence. This, I think, unquestionably detracts, to a certain extent, from the benefits of the operation. I am doubtful, however, after all, whether the recovery can be proved to be on the whole more tedious than the recovery from compound fracture of the leg ; in some cases, even the limb seems to have been restored to usefulness, as soon as the patient would have been able to walk on a wooden leg, had the limb been amputated. In Mr. Syme's case, for instance, "in the course of four weeks after the operation, the wound was all but healed, and the limb, before the expiration of three months, had regained so much strength, that the patient could make some use of it in walking."

Mr. Syme, in another place, says, "It ought to be recollected, too, that, though recovery from amputation of the thigh is usually completed in three or four weeks, it is generally *at least as many months* before the patient can rest the weight of his body on the face of the stump, so as to use it in standing or walking."

Another objection has been brought forward against the operation which requires to be noticed, viz: that, when the operation has been performed on children, the growth of the limb has been checked, and that, consequently, from the unequal growth of the two limbs, that on which the operation has been performed, becomes so disproportioned to the other, as to be ultimately useless. The only practical proof of this being so, which I can find, is Mr. Smye's case; and I think it is possible that it might be attributed in this instance to ankylosis not having taken place. Experiments have been performed on animals, to show that bones do not grow when deprived of their heads, but the results do not appear to be conclusive. A few years will be required to confirm this as a valid objection to the operation. Mr. Jones has, in the mean time, made accurate measurements of the limbs of the three boys on whom the operation has been performed, and will have an opportunity of giving further information on the subject hereafter. I have, in an earlier part of this paper, mentioned the fact, that the limb in one of Mr. Jones's cases had already, since the operation, grown considerably, and presented now no appearance of checked growth. As bearing on this question, I would be glad to know if the growth of the upper extremity is checked by excision of the elbow-joint. It is so, as far as I remember to have observed, only in a slight degree. Surely the numerous children who have undergone this operation at the age of six or seven, have not grown to adult age, with the stunted arm and hand of little more than an infant. Supposing, however, that the fact is so—that the limb is so much *respectively* shortened in after years—the objection applies only to the operation being performed on children, and has nothing to do with the question of the propriety of excision in the adult.

I have suggested that an error has, till lately, been committed in the performance of the operation, which has been allowed to interfere most seriously with its result. I refer to *the removal of the patella*. It is said that the patella is generally extensively diseased in affections of the knee-joint, demanding excision or amputation: this, I have no doubt, is an error. The amount of disease to which it is liable, is very limited—in the great majority of cases consisting only in its being more or less deprived of its cartilage, and of a rough, or perhaps carious condition of its articular aspect. The patella is rarely, if ever, the primary seat of the disease in affections of the knee-joint. When the disease commences in the bones, it invaria-

bly does so in the cancellated texture of the head of the tibia, or condyles of the femur. It is extremely rare, that there is such extent of disease in the patella as to prevent its easy and effectual removal by the gouge, the body of the bone being left uninterfered with. The advantage of leaving the patella cannot fail, I think, to be very great. The natural form of the joint is preserved; the attachment of the extensor muscles is left undivided; the wound is less extensive; the annoying tendency to displacement forwards of the end of the femur seems, in a great measure, to be done away with: and there is every reason to believe that the consolidation of the bones will proceed more rapidly, and the limb ultimately be found both more useful, and more seemly than when that bone is taken away. This is a point, however, which remains to be proved. In the two last cases, however, in which the operation has been performed by Mr. Jones and myself, the patella has been left, and the advantages of its having been retained, are already apparent in each case.

I shall not lengthen this paper by describing what appears to me the best mode of performing the operation, but merely mention that the semilunar incision seems to me the most advantageous, as being the smallest by which the joint can be satisfactorily exposed, and as giving rise to less bleeding than the H-shaped incision. There is one point, however, to which I wish to direct attention. It has been recommended that a considerable portion of integuments should be removed by a double lunated incision, to prevent the redundancy of skin which might be expected from the large amount of bone removed in the operation. I believe that this advice, if followed, will lead to great annoyance. I have not removed any portion of integuments in the cases in which I have performed the operation, notwithstanding which, the retraction of the skin was such as to cause, in each case, more or less gaping of part of the wound. Mr. Ferguson mentioned to me, that he had removed a small portion of integuments in the operation, in the case now in King's College Hospital, and that, during the patient's convalescence, he had much reason to regret, having done so, as the retraction of the integuments was such as to leave part of the end of the femur uncovered, and a thin cicatrix only now covers this point of bone.—*Monthly Journal of Med. Science, June, 1853, p. 526.*

[At a meeting of the Edinburgh Medico-Chirurgical Society, after a paper had been read on this subject by Dr. Mackenzie.]

Mr. SYME said that nothing could be more praiseworthy than trying to extend the means of affording relief by surgery, but as every step in advance was necessarily experimental, it should be understood that there were two sorts of experiments—the *experientia erudita* and the *experientia vulgaris*. In the former, a process of reasoning led to the expectation that certain causes would be followed by certain effects; but in the latter, there was no such foundation for the procedure, which was executed simply with the view of obtaining results. He thought it needless to detain the society by showing that the only warrantable experiments on the living bodies of human beings were those of the former kind; and would endeavor to explain the considerations which induced him to regard excision of the knee-joint as a dangerous and unprofitable proceeding. The large size of the wound, which was just double that of amputation, and the want of a dependent opening for the matter to escape, must be apt to occasion a profuse and protracted discharge—dangerous directly from its exhausting effects, and indirectly from lighting up disease in the pulmonary or intestinal textures, especially in subjects predisposed to such derangements, as most patients requiring the operation were. The strong and irregular action of the muscles must render it difficult to prevent displacement of the bones, impede their osseous union, and favor ankylosis, when it did occur in some awkward position. The ample experience obtained from excision of the elbow-joint—which he had himself performed little short of a hundred times—showed that many months, or years, or even a whole life-time, might elapse before the wound was so completely consolidated, as not to suffer occasionally from small collections of matter in and about the cicatrix, which interfered little with the patient's comfort, as they did not affect the usefulness of the hand, or the strength of the arm, but would entirely unfit the inferior extremity from being employed as a support for the body. In children, the danger of the operation would be probably less than in adults, and the chance of consolidation greater. But, on the other hand, there was reason to fear that the limb would not grow proportionally, and remain in the shrivelled condition usually consequent upon spontaneous ankylosis. The results already obtained were confirmatory of these theoretical considerations. Although the operation had been limited to cases favorable for recovery, a large portion of the patients, whose fate could be regarded as decided, had perished. In some cases there had been no osseous union;

and in others, ankylosis with miserable deformity. Thus in Sir P. Crampton's only successful case—the famous one of Ann Lynch, who “could walk the length of a day”—it appeared from the bones which were in the Lincoln's-Inn-Fields Museum, that the tibia and os femoris were united at a right angle, so that the progressive motion must have been of a very rare and remarkable kind ; while the subject of Mr. Park's never to be too frequently quoted case probably made a better appearance, climbing up the rigging of his ship—like the quadrumanous inhabitant of a tropical forest, than he would have done as a biped on terra firma. He, therefore, did not feel warranted to substitute this operation for amputation, which, when properly performed, relieved the patient with little risk, and enabled him to obtain an adequate support, far more useful to a poor man, and ornamental to a rich one, than could be procured through all the suffering, prolonged treatment, and risk of life attendant upon removal of the articulation. But in saying this, he begged it might be distinctly understood, not as an attack upon any other person, but simply as a defence for himself, for declining an experiment which did not in his mind possess the proper requisites of an *experientia erudita*.—*Monthly Journal of Medical Science*.

ART. V.—*Clinics*.

STATISTICAL REPORT OF THE PRINCIPAL OPERATIONS PERFORMED IN THE ENGLISH PROVINCIAL HOSPITALS DURING THE LAST QUARTER OF 1853.—[The subjoined Report includes, we believe, all the principal operations performed during the months of October, November, and December, at the following : The Bristol General, the Cheltenham, the Derbyshire General, the Durham County, the Devon and Exeter, the Hull, the Kent and Canterbury, the Leeds, the Nottingham General, the Sheffield, the South Staffordshire, and the York County Hospitals. We propose to continue the Report quarterly, and shall probably have double the number of hospitals on our next list. With regard to two of the above, the following statements include some operations performed during months a little prior mentioned. This does not, however, in the least detract from the value of the statistics, all done during the periods comprised being in each case included :]

LITHOTOMY.—Number of cases, 5 ; all recovered.

Case 1. A boy, aged 5, under the care of Mr. Gregory in the Sheffield Infirmary. He was in good health at the time of the operation, and recovered well afterwards. The calculus was a mulberry one, and weighed 10 grains. *Case 2.* In the Hull Infirmary, under the care of Mr. Craven. The boy was eight years old, and in good health. Mr. Skey's staff (projecting curve, long extremity, and semilateral groove,) was used, and, as Mr. Craven thought, with advantage. Owing to the peculiar dum-bell form of the stone, some difficulty was encountered in its extraction, and the incision of the prostate had to be enlarged. The patient recovered well. *Case 3.* In the Winchester Hospital, under the care of Mr. Mayo, a healthy boy, aged 5, recovered. *Case 4.* In the Winchester Hospital, under the care of Mr. Butler, a healthy boy, aged 7, recovered. *Case 5.* A feeble old man, aged 64, in the Winchester Hospital, under the care of Mr. Wickham. The patient recovered, but the wound was about three months in healing, and some incontinence of urine remained afterwards.

LITHOTRITY.—One case, after four sittings, has been discharged well. The patient, a man aged 60, was under the care of Mr. Teale, in the Leeds Infirmary.

HERNIOTOMY.—Number of cases, 6; recovered, 1; under treatment, 1; died, 4.

Case 1. A male infant, aged 11 months; hernia congenital, of 10 month's duration, and strangulated 2 days; sac opened. The infant did well for a fortnight, when peritonitis with pleurisy occurred, and death took place on the twentieth day. At *post mortem* the wound was found all but healed; suppuration around the canal of the tunica vaginalis, with acute inflammation of the whole peritoneum, and of both pleuræ. *Case 2.* A boy, aged 6, under the care of Dr. Lunn, in the Hull infirmary, admitted, after five day's strangulation of the bowel, in an almost moribund condition. Sac opened. He slowly rallied from the collapse in which he was, and ultimately recovered. *Case 3.* A man, aged 38, not subject to hernia before; hernia right, inguinal, strangulated 24 hours; sac opened; death 58 hours after the operation; autopsy, acute and universal peritonitis. *Case 4.* Inguinal hernia; sac opened; death (particulars could not be obtained.) *Case 5.* A femoral hernia in a woman in the Kent and Canterbury Hospital, operated on Dec. 30, and remaining under treatment at the time of the report. *Case 6.* A man, aged 55, subject to a right inguinal hernia for 35 years; stran-

gulation 48 hours; sac opened; stricture; a band of omentum; death on third day; autopsy—acute peritonitis, with extensive deposit of lymph, part of the ileum gangrenous.

AMPUTATIONS.—Number of cases, 30; recovered, 18; under treatment, 8; died, 4.

Thigh, 11: recovered, 5; under treatment, 4; died, 2. Of these, 6 were primary, with 2 deaths, 2 recoveries; 1 in an unfavorable condition, and 1 under treatment doing well; 4 were for old standing disease of the knee-joint, all recovered; and 1 for necrosis of the whole shaft of the tibia, and disease of the ankle-joint, under treatment.

Leg, 12; recovered, 7; died, 2; under treatment, 3. Of these, 2 were primary, with 1 recovery, and 1 still under treatment; 2 secondary, 1 dead, and 1 under treatment; 7 for diseased ankle; 6 recovered, and 1 dead; 1 for conical and painful stump, recovered.

Foot, 1; at the tarso-metatarsal joints, primary, recovered.

Arm, 3, all primary; 2 recovered, 1 still under treatment, but doing well.

Forearm, 3; 2 primary, 1 recovered, 1 under treatment; 1 secondary, under treatment. The last was a case of some interest. The patient, a healthy young man, had received an injury to his hand, in which the palmar arch had been wounded. The surgeon whom he consulted applied pressure and very tight bandages, which induced gangrene of the whole hand, for which latter he was sent to the hospital, where the amputation was performed.

One of the cases in the above list is a double amputation. A railway guard, aged 25, of robust constitution, was admitted, with both legs smashed, into the Nottingham Hospital, under the care of Mr. Eddison. Immediate amputation was performed; on the right above, and on the left below, the knee. In each stump there was much ecchymosis in the posterior flaps, and parts of that of the left afterwards sloughed. At the time our report was received, (a fortnight after the operation,) the poor fellow, in spite of the very free administration of stimulants, appeared to be sinking.

DEATHS.—The following are brief details of the four fatal cases;
Case 1. A man, aged 53, had his foot contused between the buffers of a railway carriage. There was no fracture or dislocation, but sloughing of the soft parts followed to such an extent that amputation through the leg had to be done on the 14th day. The man sank, apparently from exhaustion, a week afterwards. No lesion of

importance was found at the *post mortem*. *Case 2.* A weakly man, aged 47, met with a severe compound fracture of his leg. Primary amputation was performed, imperfect reaction followed, and death from purulent absorption on the 13th day. *Case 3.* A man aged 63, had his thigh amputated for severe compound fracture of the leg. Extreme collapse was consequent on the operation, and death from exhaustion occurred on the 4th day. *Case 4.* Amputation of the leg for diseased ankle was performed on a feeble and emaciated man, aged 26. Secondary hemorrhage occurred on the 10th day, and death from exhaustion on the 14th.

LIGATURE, ETC. OF ARTERIES.—*Case 1.* In the Leeds Infirmary, in a case of popliteal aneurism in which compression treatment had been tried for a month without success, Mr. Samuel Hay applied a ligature to the femoral trunk. The patient, who was a man, aged 58, recovered. *Case 2.* A man was admitted into the Cheltenham Hospital, in consequence of bleeding from the temporal artery. He had sustained a wound of it ten days previously, which had been treated by compression, and over the seat of which a small aneurismal tumour had formed. During one night, bleeding suddenly occurred, and several pints were lost. Mr. Hartley, the House Surgeon, at once cut down on the vessel, and tied both ends, after which the man did well. *Case 3.* In the South Staffordshire Hospital, ligature of both ends of the ulnar artery, on account of wound; successful.

EXCISION OF BONES, ETC.—In the Winchester Hospital, by Mr. Butler, removal of the right half of the lower jaw on account of a malignant growth. Mr. Jardine, the House Surgeon, reports, that the tumor presented the microscopic characters of epithelial cancer, and that it had apparently grown from the periostium. It had been known to exist for two months. In the course of a month after the operation, and before the wound had healed, it re-appeared, and death resulted three months later. No *post mortem* was obtained. In a case of diseased and dilated antrum, under treatment in the Leeds Infirmary, Mr. Teale removed the front wall of the cavity with bone forceps. The result was favorable.

TRACHEOTOMY.—*Case 1.* A child, aged two and a half, was admitted into the Derby Infirmary, pulseless, with a livid aspect, and seemingly asphyxiated. Examination of the pharynx with the finger detected nothing, and a tube passed down the œsophagus proved

that no source of pressure was lodged there. Mr. Dix, the House Surgeon, accordingly at once opened the trachea. A piece of quill having been passed into the wound, respiration was quickly restored, and the patient rallied. During a slight cough which followed, a wedge-shaped piece of hard boiled beef was brought up. The tube was then withdrawn, and the wound closed with plaster. The child eventually recovered, though at one period in great danger from tracheitis. The wound did not heal for upwards of three weeks. *Case 2.* In the Nottingham General Hospital, Mr. Eddison performed the same operation under somewhat similar circumstances to the above, on account of the impaction of a piece of apple in a child's larynx. The four upper rings of the trachea were opened, and very shortly afterwards the foreign body was coughed up. The patient did remarkably well, and the wound soon healed. It was believed that there was a second portion of apple lodged in the right bronchus, which, as it was never brought up in mass, was probably softened and got mixed with the expectoration. *Case 3.* A man, aged 47, a patient in the Leeds Infirmary, had his respiration much obstructed by the emphysema about the throat, consequent upon a fracture of the thyroid cartilage. Mr. Teale opened the trachea, and a perfect recovery resulted.

OPERATIONS FOR URETHRAL STRICTURE.—In a case in the Nottingham Hospital, in which an extensive and cartilaginous stricture existed with several fistulous communications with the urethra, Mr. Eddison performed the operation of the perineal section. The patient has since done well, but is yet under treatment. In a second case, Mr. Eddison opened the posterior part of the spongy portion of the urethra after extravasation of urine. The penis was sloughing, and the scrotum infiltrated with urine, at the time of the man's admission, and he was extremely depressed. Although free incisions were practiced, and stimulants liberally administered afterwards, yet he sank and died within a few days.

PUNCTURE OF THE BLADDER.—In three cases, all of which proved fatal. In two, it was performed per rectum, on account of impassable stricture. In the third, a man was admitted moribund from long retention of urine; the catheter failing, the bladder was punctured above the pubes, and about a gallon of urine, mixed with pus, removed. The man lived four hours afterwards.

PARACENTESIS THORACIS.—In one case, for the remains of an empyema, which had been evacuated some months previously. The

first opening had been in front, to the left of the sternum; the second was between the sixth and seventh ribs posteriorly. A fluctuating tumor had presented, and it was simply opened with a lancet. The patient recovered.

PARACENTESIS ABDOMINIS.—In four cases of ovarian dropsy, and two of ascites. In one of the former, some fluid existed in the peritoneal cavity, as well as in an enormous ovarian cyst; and having been first withdrawn, the walls of the latter were found to be so thick that it was deemed best not to complete the operation. The patient died five days afterwards. In another case, the patient died after the rapid refilling of the cyst; the remaining four have been relieved by the operation.

EXCISION OF MALIGNANT TUMORS. SCIRRUS OF THE BREAST.—Five cases, all of which had recovered. In one, in the Canterbury Hospital, the patient, a married woman, age 42, stated that she had first perceived the tumor while suckling, and within six weeks after delivery. In this instance, a gland in the axilla was also removed. The patient's health much improved after the operation, and the wounds healed well.

EPITHELIAL CANCER OF THE LIP.—Four cases, all recovered. In one, the entire lip was removed, and a plastic operation for its restoration is contemplated. Another was of interest, from the fact that the same disease had been removed eight years previously. About a year before the disease re-appeared, the man had resumed the habit of smoking.

CHIMNEY-SWEEP'S CANCER (EPITHELIAL).—Two cases—both recovered. In one, under the care of Mr. Smith, in the Leed's Infirmary, the disease affected the cheek of a chimney-sweep, aged 23, living in a country town. He had the appearance of having been very neglectful as to cleanliness. In the second, the growth affected the scrotum of a sweep resident at Winchester.

CANCER OF THE SKIN.—A case operated on at the Exeter Hospital, Mr. Clapp, the House Surgeon, thus describes: A woman, aged 62, tumor the size of a small orange, somewhat pedunculated, very hard, painful, bleeding, and oozing a thin sanious discharge, of six year's growth; said to have commenced as a wart, having at its base three smaller wart-like ones, attended by cachexia, but with no visceral or glandular disease. The operation proved it to be connected with the skin only; and on microscopic examination, Mr. Clapp

believed it to be an example of epithelial cancer. The wound soon healed, and left a healthy cicatrix. In a case under the care of Mr. Teale in the Leeds Infirmary, an ulcerated epithelial cancer was successfully excised from the scalp of a patient, aged 33.

MELANOSIS OF THE EYE.—In the Sheffield Infirmary, Mr. Gregory extirpated the eyeball of a man, aged 43, in whom the disease, which the microscope afterwards proved to be melanotic, had existed for six or seven years. The optic nerve where cut appeared healthy. The man recovered well, and appeared subsequently in excellent health.

EPITHELIAL CANCER OF THE LABIUM.—One case, recovered.

EPITHELIAL CANCER OF THE PENIS.—Two cases, recovered.

EXCISION OF NON-MALIGNANT TUMORS.—*Fatty*, nine cases, all recovered. *Encysted*, five cases, all recovered. *Epulis*, two. *Enlarged Clitoris*, one. *Diseased Bursa*, two. *Parotid Tumor*, one. *Tumor in the Eyelid*, one; all recovered, *Enlarged Testis*, one recovered. This was a singular case. The patient, a young man, of 20, was under the care of Mr. Gisborn in the Derbyshire General Hospital. He stated that his testis had been much enlarged ever since the age of 7; and that some weeks before admission, after an attack of gonorrhœa, it had inflamed and suppurated. It weighed, after removal, a pound and a half; and on making a section of it, there were found in its centre, several distinct masses of osseous deposit inclosed in separate sacs, the largest of which closely resembled a molar tooth, but had the structure of true bone.

EXOSTOSIS.—The following occurred in the Kent and Canterbury Hospital; R. L., a robust girl, aged 12, had an exostosis the size of a walnut, growing from almost the whole length of the inner side of the first phalanx of her right middle finger, and another of similar character occupying the whole of the outer side of the second phalanx of the ring finger of the same hand. They had existed as long as she could remember, but had grown more rapidly during the last eighteen months. It was intended to have excised them, but during the operation, the bones from which they grew were found so much involved that amputation had to be performed, in the one case, at the metacarpo-phalangeal joint; in the other, at that of the first phalanx.

CUTANEOUS TUMORS (OF A DOUBTFUL NATURE.)—The following occurred, also, in the Canterbury Hospital: A healthy looking girl, aged 20, had on her abdomen, two small, fleshy tumors, very pain-

ful, but not at all tender, one of which, on the left of the umbilicus, resembled a large, rounded nipple, with a dark brown areola; the other, in the left iliac region, was flatter and more irregular in shape; the latter had existed from childhood, the former for about three months. After excision, the nipple like growth had the appearance of firm fat, while the other, which was lobulated, had a bluish color, and was hard and almost cartilaginous in structure. The wound in the iliac region did not heal kindly, but some sprouting granulations of suspicious appearance formed in it, which required to be destroyed by caustics; the other soon cicatrized. *Sero-cystic sarcoma of breast* from a woman, aged 41, in the Leeds Infirmary, by Mr. Smith. It had been ten months growing, and weighed two pounds and a quarter. Recovered.

LOOSE CARTILAGES IN JOINT.—In the Derby Hospital, Mr. Johnson removed three loose cartilages from the knee of a man aged 56. Two of them about the size of musket balls were excised by a free incision from a sac over the outer side of the joint, and probably not having direct connection with it. The third, in size and shape much resembling a patella, was taken from under the ligamentum patellæ or its inner aspect. The wounds discharged healthy pus for a few days and then closed. The swelling of the knee gradually diminished, and the patient did well.

NECROSIS OF BONE.—Four cases have been operated on, all of them with great relief.

RADICAL CURE OF HYDROCELE.—In five cases, injection with diluted tincture of iodine has been practised. In three, cure ensued, but in the fourth the cure is not yet complete, and in the fifth the patient was lost sight of before the result was certain; he had, however, done well.

PLASTIC OPERATIONS. HARELIP.—Four cases; all cured.

CICATRIX OF BURN.—Two cases relieved.

Tenotomy of the tendo-Achillis for talipes equinus in five cases, all with success. In a case in the Derby Hospital, under the care of Mr. Gisborne, the tendo-Achillis, the peronei, and the extensors of the toes, were all divided on account of severe equinus. The patient (aged 15) left the hospital two months afterwards, with a much improved foot.

UTERINE POLYPUS.—One case; the tumor, a common fibrous polypus, was removed by ligature, and the patient did well.

CATARACT.—*By absorption* in four cases, all of them double; doing well, but yet under treatment. *By depression* in six cases, and in five with successful results.

ENTROPION.—One case; successful.

STRABISMUS.—Three cases; all successful.—*Med. Times and Gaz.* Feb. 4, 1854.

PART THIRD.

BIBLIOGRAPHICAL NOTICES AND REVIEWS.

Practical Observations on Aural Surgery; and the Nature and Treatment of Diseases of the Ear. With Illustrations. By WM. R. WILDE, Fellow of the Royal College of Surgery in Ireland; Surgeon to St. Mark's Ophthalmic Hospital; Honorary Member of the Royal Medical Society of Stockholm, etc., etc. Philadelphia: Blanchard & Lea, 1853. For sale by Riley & Co.

The work before us embraces a little less than five hundred pages, and has been issued from the press in good style.

In offering this work to the profession, the author confidently hopes to occupy a void in our Medical Literature; one, too, that has been long felt, and that no work yet published has seemed adequate to fill.

The principal design of the author seems to be to expose error and establish truth; to lay down just principles for an accurate diagnosis of diseases of the Ear; to rescue their treatment from empiricism, and found it upon the well established laws of modern pathology, practical surgery, and reasonable therapeutics. For doing this, his opportunities seem to have been rare, having been connected for ten years with the management of a large institution in Dublin, for a long time the only one of the kind where clinical and practical instruction in Aural Surgery was delivered in Great Britain.

One of the greatest imaginary difficulties to the student of Aural Surgery, is supposed to be experienced in acquiring a knowledge of the Anatomy and Physiology of the Ear. The minuteness of the organ itself, the difficulty of dissecting it from its depth, the com-

plexity of its structure, and the small hard bone in which it is placed, as well as the number of hard names attached to its different parts, taken all together, seem to constitute an unsurmountable task ; and hence, perhaps, the small number of Medical men who feel themselves competent to practice Aural Surgery.

These obstacles, however, are more imaginary than real ; a little industry and patience properly directed, will soon unravel its anatomy, and the appearances and movements of its different parts in health, sufficiently to comprehend the diseases to which it is liable. As all know the Ear is early developed, on this account it can be examined very well in foetuses — better, indeed, than in aged subjects. Material of the former kind is not scarce in even country practice, and hence no one can have an excuse for not investigating the subject.

As a specimen of the work, we insert the following :

“Up to a very recent period we possessed no better means of examining the external meatus and the membrana tympani than that afforded by the usual ear speculum, made somewhat in the form of a crane-bill forceps, and derived, with various modifications, from the time of Fabricius Hildanus. Itard, Deleau, Verret, Robbi, Kramer, and others, have improved upon this speculum, which was that in general use in this country until I introduced the tubular form in my Essay on Otorrhoea. Another description, with three arms, and opening by a screw in the form of a vagina speculum, was manufactured by Mr. Weiss, on the supposition that the external auditory passage could be increased in calibre by mechanical means, and Hoffman has published an account of a somewhat similar instrument in “*Casper's Wochenschrift*,” for 1841. In making examinations of the meatus and membrana tympani with any of these instruments, the chief requisite is a *strong direct light*, transmitted without interruption to the tympanul membrane, or that portion of the passage which we wish to examine. This is best effected by means of the sun's rays, but as the ordinary speculum can only dilate or straighten the external cartilaginous portion of the passage, a person accustomed to aural examinations can frequently, especially where the meatus is of a large size, observe the tympanul membrane, or at least a portion of it, without, as well as with, such an instrument, by merely lifting up the auricle with one hand and pressing the tragus forward with the thumb of the other. The light must, however, be strong, and made to fall directly upon the passage. In

all such examinations, the patient should be seated beneath the examiner, with the head slightly bent, opposite a window *through which the sun is shining* at the moment, and, if possible, between the hours of eleven and three."

This work is a contribution to science, and, inasmuch as the class of diseases of which it treats is likely to fall, for some time at least in our country, into the hands of the general practitioner, it behooves him to avail himself of every source of information at his command.

Lectures on Surgical Pathology, delivered at the Royal College of Surgeons of England. BY JAMES PAGET, F. R. S., Prof. of Anatomy and Surgery to the College; Assistant Surgeon and Lecturer on Physiology at St. Bartholomew's Hospital. Philadelphia: Lindsay & Blakinston. For sale by Randall, Aston and Long.

The Lectures which go to make up this work, were delivered at the Royal College of Surgeons, during the six years from 1847 to 1853, which time the author held the office of Professor of Anatomy and Surgery to the College. Listened to with such favor, the author has, as he says, ventured to give them to the public in a form to be more generally examined.

The design appears to be to give a course of Lectures which will illustrate the *general pathology of Surgical diseases, in conformity to the larger and more exact doctrines of physiology*. For the purpose of doing this, numerous wood engravings are introduced into the work, that add very much to its value as an elementary treatise.

The question might be asked, what can be said on Surgical Pathology that is different from that contained in the books already before the profession? We answer, *much*. There is scarcely a work, however voluminous, that discusses surgical pathology in such a way as to contribute to correct views on the propriety of Operations. Physiology lies at the foundation of Pathology, and without a knowledge of the former, all the views of the latter are imperfect. Natural processes, together with all the circumstances that affect them in health, must be studied before diseased ones can be appreciated. How many of our surgeons are good physiologists? How many, instead of regarding their vocation as the one set apart for the exercise of the *ultima ratio medendi*, go to work patiently for

the purpose of ferreting out the secret processes of nature? and yet the latter is the only course that gives character to a surgeon. A butcher can cut off a man's leg, adjust the bones of a fractured cranium, or remove a tumor; but it requires a *surgeon* to know when it is proper to do such things, whether or not the patient would be thereby benefited. Lately attention among surgeons has been awakened to the results following the removal of what are usually termed *malignant growths*, and as a consequence, we have some very respectable monographs on the subject, the tendency of which must be to limit the scalpel to a nanauwer the sphere of action. In our opinion it requires more sense to know when an operation should *not*, than it does to know when it should be performed.

The plan pursued in the work before us, is, in the first place, to present and discuss such subjects as *Nutrition*—its nature, purpose, and conditions, in order to prepare the reader to appreciate what is said on departures from the healthy standard. The following may be regarded as a specimen of the style of the author, and of his doctrines:

“In the natural course of life, the formative process manifests itself in three modes, which, though they bear different names, and are sometimes described as if they were wholly different things, yet probably are only three expressions of the same law, three effects of the same force, operating in different conditions. The three, enumerating them in the order of their time, are *development*, *growth* and *assimilation*, or maintainance.

“By development we mean generally the process by which a tissue or organ is first formed, or by which one as yet imperfectly formed is so changed in shape or composition as to be fitted for a higher function, or finally is advanced to the state in which it exists in the most perfect condition of the species.

“We must carefully distinguish development from mere increase; it is the acquiring not of greater bulk, but of new forms and structures, which are adapted to higher constitutions of existence. For example, when in the embryo groups of nucleated cells are changed into muscular fibres, there is not necessarily an increase in size; or if there be, there is something more; there is a change of texture and an acquirement of power adapted to a higher state of existence; these constitute development, so when, from the simple cavity and walls of the embryonic digestive system, the stomach, intestines, liver pancreas, and other organs are produced, these are developed,

there is increase; but at the same time something more than mere increase."

In the elucidation of his subject, the author has brought to his aid the use of the *microscope*; the work, as a consequence, abounds in numerous microscopical diagrams, illustrating almost every variety of morbid growth which usually falls within the range of surgery. On the subject of *Cancer*, the microscopic illustrations are very copious, and well calculated to facilitate diagnosis. In describing the microscopic appearances of *hard Cancer*, the author remarks:

"In very thin sections, it is not very difficult to see the infiltrations, or insertion of the cancer substance in the interstices of the affected tissues. It may be most clearly seen in affections of any part of the skin, recently invaded by the cancer, for here, in the meshes of the reticulated fibro-cellular and elastic tissues, the cancer particles are quite distinct, filling every interval, and not obscured by the debris of the gland-ducts and their contents. I am not aware of any more orderly plan of arrangement of the materials of the cancer, than that which may be expressed by saying that they fill the interstices when they accumulate quickly and abundantly; or, when they shrivel and degenerate they may allow the tissues to collapse or contract.

The elementary structures of the cancer substance thus infiltrated, in the breast for example, are chiefly two: namely, 1. Certain cells and corpuscles, and 2. a fluid or solid blastema or merely homogeneous substances in which these lie imbedded."

Here, for want of space, we must close our notice of this valuable work. Any medical library is incomplete without it, while to the surgeon it is indispensable.

Pneumonia. Its supposed Connection, Pathological and Etiological, with Autumnal Fevers; including an Inquiry into the existence and Morbid Agency of Malaria. By R. LA ROCHE, M. D., Member of the American Philosophical Society of the American Medical Association; Fellow of the College of Physicians of Philadelphia, etc., etc. Philadelphia: Blanchard and Lea, 1854. For sale by Riley & Co.

This work, the author intimates, has not been got up for the purpose of advancing and supporting any new theory, with refer-

ence to the principal subject discussed, but to collate within a small compass all the facts known to the profession with regard to one of the most frequent diseases, and its supposed connection with Autumnal Fevers.

The author combats what we suppose nobody with sense believes, viz : that there is a necessary connection between our Autumnal fevers, intermittent remittent, and Pneumonia. "The idea," he says, "of a close connection, as regards both causation and nature, between thoracic inflammations and malarial fevers of various grades and types, has long been entertained, and continues even now to be advocated by writers of respectable standing."

To our mind, the above statement contains a slight, or rather a gross misapprehension. No educated man with whom we have ever talked, either North or South, doubts that intermittents and remittents are the offspring of a distinct specific cause, existing in districts of peculiar characters; nor that Pneumonia is connected, intimately in its origin with climate, vicissitudes of temperature, etc. That the two classes of disease often prevail at the same season, and that the same individual is frequently the subject of both at the same time, are facts that have not escaped the attention of any one, however stupid. But the frequent connection of the two diseases in the same person, has not been referred to as evidence of identity of cause by any one whose observations are entitled to respect; and hence, we think the principal effort of the book before us has been directed against a phantom.

In malarious regions, Pneumonia, as all know, is of frequent occurrence, particularly during certain seasons of the year. Not unfrequently the pathological elements of this complaint are very much modified by malarious influences. Most, if not all the symptoms, assume a periodical character, and the case, which was at first amenable to evacuants and antimony, after a while requires anti-periodics, such as quinine, arsenic, etc.

A reason for the frequency of pneumonia in malarious districts, may be sought for in the fact that such districts lessen in a very sensible manner every vital function of the organism, and as a consequence predispose the inhabitants not only to pneumonia, when the season for its prevalence arrives, but also to epidemics of every kind. These epidemics are frequently modified in a manner similar to what has been found to be true of pneumonia; but nobody has thought it necessary to caution us about regarding them as being identical in cause with intermittents and remittents.

What we have said is not designed to disparage the work. It contains five hundred pages of matter relating to the two classes of diseases, and so much has been brought forward with reference to the character of each, that no one who has not had his attention specially turned in the same direction, can rise from its perusal without feeling benefitted.

To Charles D. Meigs, M. D., the author has thought proper, in a very modest and well written letter, to dedicate the work—a compliment to Dr. M. well merited, if industry and zeal have anything to do with such things.

Clinical Report on Chronic Pleurisy, based on an Analysis of forty-seven cases. By AUSTIN FLINT, M. D. Professor of Practical Medicine in the University of Buffalo, New York, and in the University of Louisville. Buffalo: Printed by Jewett Thomas & Co., 1853.

The Report covers some fifty-eight pages, and like most of what comes from the author, exhibits industry applied in the right direction. An analysis of forty-seven cases of chronic pleurisy, it is true, may not lead to the establishment of a single fact, yet it is nevertheless the only plan by which *true* facts can be established. The natural history of the disease under consideration is a fruitful theme, and one which has previously been too much neglected. Although not of very frequent occurrence, it nevertheless is not so rare, but what it falls occasionally under the observation of most practitioners. In most instances, the author thinks it is not recognized. Indeed, Hope also thinks that there is no class of affections more frequently overlooked than this. The essay before us, will improve the diagnosis.

In the *treatment*, the author among other things, makes some remarks on *paracentesis thoracis*, as devised by Dr. Wyman of Massachusetts, when effusions are troublesome. This method consists in using an exploring canula and trochar, which is attached by a flexible tube to a suction pump, so constructed, that the fluid may be removed from the chest, through the canula, and discharged from the pump by another aperture. This method is considered an important improvement in the management of chronic pleurisy. (For sale by H. C. Morton, Louisville, Ky.)

PART FOURTH.

EDITORIAL AND MISCELLANY.

The circulation of the blood—New motive powers.

In our exchanges from the North, and also from the South, we notice that considerable inquiry has been excited in regard to the circulation of the blood. The subject also lately came up in the Drake Society of this City, and occupied some three or four evenings in its discussion.

A knowledge of Harvey's discovery seems, at this day of progress in physiological matters, to be nothing more than the mere alpha of the process. The normal amount of the blood, its chemical composition, the capacity of the central organ, and the vessels connected with it, to contain and propel the fluid to the various parts of the organism; and the probability that other forces, more potent and better adapted to the purpose, are concerned in the process, are questions that are now exciting attention as being of especial interest to the physiologist, pathologist, and practicing physician.

The principal effort of those who have brought the matter forward for consideration at the present time, seems to be, to show that there are other forces, besides that of the heart, to which the movements of the blood are due. The sum of these, Dr. Cartwright proposes to express by the term, *Hæmatokineté*. To the introduction of this term into physiological science, a formal protest has been entered in certain quarters. Among others who reject it, and mostly for whose benefit it has been supposed it was coined, is Mrs. Willard of Troy, New York, who has made herself quite notorious as the alleged discoverer of what she regards a "*New Motive Power*."

She insists on the truth of the following doctrines, which we have thrown into form as a kind of substratum for her theory.

1st. That in the process of respiration, combustion takes place from the presence of the oxygen of inhaled air, and the carbon of venous blood, and caloric, as a consequence, is set free; 2d. About a fifth part of all the blood in the system is in the lungs, and about seven-eighths of this is water. 3d. The temperature of the blood in the lungs is about thirty degrees higher than is necessary to convert

water *in vacuo* into vapor, and the blood in the lungs is mostly *in vacuo*; 4th. Such being the case, a portion of water in the blood is there changed to vapor, and the volume of the blood becomes so expanded, that it must move. From the influence of the valvular system, the course is directed to the left side of the heart. Possessed of great irritability, this organ as soon as touched by a warm fluid beats, and by its valvular arrangement, the current is propelled forwards.

Dr. Cartwright, who is supposed to have exhibited some sympathy for this theory, has been held up, by several writers of some ability, and formally ridiculed. This has awakened in the Dr. a disposition to defend himself, and as a consequence, he reviews the whole subject connected with the motive powers of the circulation, and makes some experiments, an account of which is published in the New Orleans Medical and Surgical Journal, that are among the most striking on record.

It is perhaps generally known that Prof. Draper, in a *treatise on the forces, which produce the organization of plants*, puts forth a physical principle, which is appealed to, by those who are incredulous in regard to the agency of the heart, in capillary circulation. It seems it is susceptible of demonstration, that "if two fluids communicate with one another in a capillary tube, or in a porous or parenchymatous structure, and have for that tube different chemical affinities, movement will ensue; that liquid which has the most energetic affinity will move with the greatest velocity, and may even drive the other liquid before it." Now then, that arterial blood, charged with oxygen with which it is ready to part, and being prepared to receive in exchange carbonic acid, which the tissues set free—must obviously have a greater affinity for those tissues than venous blood, in which both these changes have already been affected. (Carpenter.) The blood, upon mere physical principles, which enters the systemic capillaries on one side of the net work, must as a consequence drive before it, and expel on the other side the blood which has become venous, while traversing it. Of course, in the pulmonary capillaries opposite affinities would prevail.

Such is the principle, and such the explanation of the circulation by capillary *attraction* and chemical *affinity*.

In support of this theory, much has been brought forward in regard to the circulation of *sap* in vegetables, and the circulation of the blood in inferior animals, in neither of which, is there any cen-

tral propelling organ. Take as a sample the experiments of Hales: "In experiment XXI, I exposed one of the chief roots of a pear tree in full growth, at a depth of two and a half feet, cut off the point of it, and connected the part of the root left in connection with the stem with a tube, which was filled with water, and closed it with mercury. In consequence of the evaporation from the surface of the tree, the root absorbed the water in the tube with such force, that in six minutes the mercury rose eight inches in the tube. This is equal to a column of water nine feet high."

In some of the lower classes of animals, there appears to be an absence of any central propelling organ. This is true of all of two divisions of the animal kingdom—the *Animalia Radiata*, and *Animalia Articulata*. Their organs of respiration are almost universally seated on the surface of the body, and they possess no organ similar in function to that of a heart. The same thing, is *in part* true, of several classes of Moluscous and vertebrated animals. In these, although, there is a central organ, it seems not to be constructed for propelling purposes.

With reference to all these facts and principles, it may be stated, that they go to make it very plausible, that there are other forces besides those of the heart, to which we might look for an explanation of the chief motive power of the circulation, provided we had no heart. But inasmuch as nearly all vertebrated animals possess this organ, and inasmuch as it is highly endowed with contractile powers, which, according to the experiments of Hale's, is adequate to sustain a column of water $7\frac{1}{2}$ feet high, the weight of which would be 4 lbs. 6 oz.; and inasmuch as it appears to be beating away all the time in the chest, in a series of well defined rythmical contractions, that with many, are the *sine qua non* of vitality, it might not be a very unwarrantable physiological conclusion to assign it some little place in the list of motive powers.

That however, the heart with all its power, its *vis a tergo* and its *vis effronte* is adequate to explain every thing connected with capillary circulation; the circulation in *erectile* tissues, the *portal* circulation, the circulation which presents itself within the cranium, &c. &c., is a position to which no one can yield his assent, when all the facts are carefully examined.

MEDICAL HERESIES, now as in times past, continue to take up considerable space in our Medical Journals. But this is not all, books are every now and then written with great care and accuracy, for their exposure and refutation, still the vice continues as rife now as formerly, and in some forms has a deeper hold upon community, than at any former period.

Perhaps it would be well enough now to pause and consider what has been the effect of these attempts to put down quackery. *Can it be that they have coincided with the vice?*—that they have been the principal means by which it has been kept alive? Simpson publishes a work in Edinburgh, Scotland, in refutation of the tenets of Homœopathy. It is reviewed elaborately in the leading journals of Europe; then republished in this country, and again reviewed by most of our journals. The effect of all this is to *advertise* Homœopathy—to make hundreds and thousands know that such a thing exists, who otherwise would never have heard of it. Besides the very fact of noticing it, gives it consequence, and excites the passion for new things in the multitude. They do not stop to enquire into its claims upon reason or common sense, but decide to give the system a trial. Once in for humbuggery of any kind, a taste for things of that character is developed, and those who find out at last, that they have been deceived by any one of them, instead of returning to science, seem the more eager to embrace another.

Again, are these heresies originated, and submitted to the people, as an experiment upon their disposition to patronize them, or are they the result of a demand for such things, proceeding from defective medical knowledge, and deficiency of the reasoning powers, when applied to things medical? If the latter, the remedy will not be found to consist in making a fuss with those who are ministering to the cravings of the depraved appetite, but in the administration of such things as will cure the appetite itself.

We need no more books, such as Simpson's and Hooker's, written to prove the inefficiency and imposition of the various empyricisms of the day, for if this were done, with all the certainty of demonstration, the results would be the same. What we want is something to dissipate the ignorance, the almost universal ignorance which obtains in regard to the different branches of science, which make up medical science. Any one who believes that this can be brought about, many look forward to the time when quackery will disappear from the land. It will require nothing short of a levelling

up of the masses, including clergymen, lawyers and politicians to the standard of common sense and science. As things are at present, "the credulity of dupes is as inexhaustable as the invention of knaves" (Burk.)

FEMALE PHYSICIANS. — The *Boston Female Medical College* has graduated the following young ladies: Miss S. Fletcher, Lowell, Mass; Miss L. A. Harris, Waterville, Maine; Miss Mary R. Jenks, Springfield, Mass.; Miss M. N. Thurston, Mass.

In these days of progress, and the rule of Young America, we are almost prepared for anything, however much opposed to the prejudices of education. Not that we believe all that is going on is right, or will be ultimately sanctioned by the common sense of society. The present, indeed, is an age of *toleration*. It permits not only innovations upon usages and institutions that have been long established, but provides also an open theatre for the introduction and rivalry of every species of charlatanry. Whether this is right or not, we have no disposition to argue. In regard to one thing, however, we have great faith; it is that the chaff will, in time, be separated from the wheat, and that reason and propriety will ultimately prevail.

In nothing, however, that we have said, do we design to be understood as taking grounds against the introduction of females into the medical profession. We only intend that our remarks all be interpreted to suggest that the attempted innovation has happened at a time when humbugs are tolerably rife.

The avocation to which the softer sex aspires, of course has been thoroughly surveyed, in all its departments; and, if any one would become so far lost to prudence as to betray any misgivings that the cost had not been fully counted, and should in his verdancy suggest that the duties of the medical profession are arduous, mentally and physically, more so than can be endured for any length of time by a well constituted male, of course he would be set down as a simpleton, a *ninny*. As a consequence, I suppose, some of the editors of our Journals have either remained silent spectators of what was going on, or taken grounds in favor of the enterprize, and expressed a conversion, to the fullest extent, in the doctrine of "Woman's Rights," as has been done lately by the editor of the Nashville, Tenn.,

Medical Journal. We have glanced slightly at the syllogisms by which the editor to which we have alluded has been convinced of the errors of his former life ; and by way of bolstering him up, we can assure him that they are very much like those of Miss Lucy Stone, in a lecture delivered a few evenings since in this City on 'Woman's Rights.' As far, however, as we have been able to comprehend, these syllogisms did not agree in all respects exactly with the *dictum de omni et nullo* of Aristotle and Whately. Still these men are *old Fogies*, perhaps not always to be trusted, particularly when they differ in logic with other personages of distinction!

From the representation of those who are engaged in advocating the doctrine of Woman's Rights, it might be presumed that the *males* have been treating the females about in the same way that Russia has been treating Poland, and, as a consequence, the peace of society is about to be disturbed, and the whole country plunged into a "sexual" war. Should such unfortunately prove to be the case, of course a field of usefulness will be opened to our friend of the *Nashville Journal*, and in the event of an engagement between the belligerents, he may be looked out for in the costume of a Captain.

BOOKS RECEIVED.—We have received a copy of the "*Types of Mankind*," illustrated by selections from the inedited papers of Samuel Geo. Morton, M. D., and by additional contributions from Prof. L. Agassiz, L. L. D., W. Fisher, M. D., Prof. H. S. Patterson, M. D. By J. C. Nott, M. D., and Geo. R. Gliddon: Philadelphia, Lippricut, Grambo & Co. For sale by Riley & Co.

Also, Richardson's Human Anatomy: Philadelphia, Lippricut, Grambo & Co. For sale by Riley & Co.

The above works were received too late for review in our present number. They will be attended to in our next.

FEVER A CURE FOR INSANITY.—In the annual report of the Superintendent of the Ohio Lunatic Asylum, we see it stated that 31 cases of *typhoid* fever occurred in the Institution during the past summer. Of this number, one terminated fatally ; and *thirteen* were restored to reason concurrently with their convalescence from the fever.

TABLE showing the weight of a fluid oz. of urine in grains for specific gravities between 1000 and 1041; also the amount of solids and water in each fg. 3; als othe solids in a pint, in apothecary's measure, similar to the tables of G. BRID, as given in Imperial measure.

By THEO. G. WORMLEY, M. D., of Columbus, O.

Sp. gr.	weight of fl oz. in grs.	Solids in fl oz. grains.	Water in fl oz. grains.	Solids in fl pt. in grs.	Sp. gr.	weight of fl oz. in grs.	Solids in oz. grains.	Water in fl oz. grains.	Solids in fl pt. in grs.
1000	455,6944	.....	455,6944	.....	1021	465,2641	22,7654	442,4987	364,2464
1001	456,1501	1,0628	455,0873	17,0048	1022	465,7198	23,8728	441,8470	381,9648
1002	456,6058	2,1278	454,4780	34,0488	1023	466,1755	24,9823	441,1932	399,7168
1003	457,0615	3,1948	453,8667	51,1168	1024	466,6312	26,0940	440,5372	417,5040
1004	457,5172	4,2640	453,2532	68,2240	1025	467,0869	27,2078	439,8791	435,3248
1005	457,9729	5,3354	452,6375	85,3664	1026	467,5426	28,3227	439,2189	453,1792
1006	458,4286	6,4088	452,0198	102,5408	1027	467,9983	29,4418	438,5565	471,0688
1007	458,8843	7,4844	451,3999	119,7504	1028	468,4549	30,5619	437,8921	488,9904
1008	459,3400	8,5621	450,7779	136,9936	1029	468,9097	31,6842	437,2255	506,9472
1009	459,7957	9,6419	450,1538	154,2704	1030	469,3654	32,8086	436,5568	524,9376
1010	460,2514	10,7238	449,5276	171,6808	1031	469,8211	33,9352	435,8859	542,9632
1011	460,7071	11,8079	448,8993	188,9264	1032	470,2768	35,0638	435,2130	561,0208
1012	461,1628	12,8941	448,2667	206,3046	1033	470,7325	36,1946	434,5379	579,1136
1013	461,6185	13,9824	447,6361	223,7184	1034	471,1882	37,3275	433,8607	597,2400
1014	462,0742	15,0728	447,0014	241,1648	1035	471,6439	38,4625	433,1814	615,4000
1015	462,5299	16,1654	446,3645	258,6464	1036	472,0996	39,5997	432,4999	633,5952
1016	462,9856	17,2601	445,7255	276,1616	1037	472,5553	40,7390	431,8163	651,8240
1017	463,4413	18,3569	445,0844	293,7104	1038	473,0110	41,8804	431,1306	670,0864
1018	463,8970	19,4558	444,4412	311,2928	1039	473,4667	43,0239	430,4428	688,3824
1019	464,3527	20,5563	443,7958	328,9104	1040	473,9224	44,1696	429,7528	706,7136
1020	464,8084	21,6601	443,1483	346,5616	1041	474,3837	45,3178	429,0659	725,0848

Method of making a quantitative analysis of the amount of oxalate of lime ($\text{CaO}, \text{CO} \times 2\text{Aq}$) found in urine. By THEO. G. WORMLEY, M. D., Columbus, Ohio.

We first change the oxalate of lime into the chloride of calcium, and then pursue a process similar to that of "alkalimetry," that is, find the amount of oxalic acid that the chloride thus obtained will saturate.

Before we can apply this test, we must know the exact value of our oxalic acid, and this we may do by exposing pure crystalized oxalic acid ($\text{HO}, \text{CO} \times 2\text{Aq}$)²³ in a water bath, and carefully raising it to a temperature of about 150° until it crumble to a dry powder;

we thus drive off the water of crystalization, and it will then have the formula HO, CO , the atomic weight of which is 45. If we dissolve one grain of this acid in a cubic inch, of water contained in a tube graduated to hundreths, each measure will indicate 1-100 of a grain of oxalic acid.

We next proceed to change the oxalate of lime found in the urine, into the chloride of calcium, (CaCl) which may be done by the following process :

Filter the urine through the best filtering paper, taking care to first moisten the filter with pure water. After the urine has passed through, wash the filter ; there will then remain upon it all of the *oxalate of lime*, together with crystals of *ammonia phosphate of magnesia*, (2MgO ; $\text{NH}_3\text{O}, \text{PO} \propto 12 \text{Aq}$) *vesicle mucous*, *epithelial scales*, and perhaps crystals of *uric acid* and *chloride of sodium*. Dry the filter and digest it in dilute hydrochloric acid, which will dissolve the oxalate of lime, ($\text{CaO}, \text{CO} \propto \text{HCl} = \text{CaCl} \propto \text{HO}, \text{CO}$) together with the triple phosphate, and perhaps part of the vesicle mucous, the epithelial scales and uric acid will remain undissolved ; by passing through a filter we will get rid of the insoluble portion, and have an acid solution of the salts of lime and magnesia, together with the free oxalic acid liberated from the oxalate of lime ; add excess of ammonia, which will neutralize the free hydrochloric acid, and at the same time decompose the chloride of calcium, forming chloride of ammonium, and oxalate of lime ; ($\text{CaCl} \propto \text{HOCO} \propto \text{NH} = \text{CaO}, \text{CO} \propto \text{NH}, \text{Cl}$) we also cause the precipitation of the ammonia phosphate of magnesia now add excess of acetic acid, (HO, CHO) which will dissolve the precipitated salt of magnesia, but leave the oxalate of lime undissolved ; by filtration we separate the magnesian salt and retain the lime upon the filter ; wash the filter, dry and maintain it at a red heat for several minntes in a platinum crucible. The oxalate will become changed into the carbonate of lime ; ($\text{CaO}, \text{CO} = \text{CaO}, \text{CO} \propto \text{CO}$) act upon this with dilute hydrochloric acid which will form chloride of calcium, again filter, neutralize with ammonia, which will perhaps cause a slight precipitate ; if so, filter. We will now have an alkaline solution of chloride of calcium, the atomic weight of which is 55. We now add to this our solution of oxalic acid drop by drop, until it ceases to give a precipitate, which may easily be ascertained by placing a drop of the filtered fluid under the microscope and adding a

drop of the oxalic acid solution; if it yields a precipitate, we still add more of the acid to the original solution.

From the amount of acid required to neutralize, we ascertain the amount of chloride of calcium present by the following equation :

45:55::a (the amount added) : x = (the amount of chloride present.) Then by taking the atomic weight of chloride of calcium (55) for the first term, and the atomic weight of oxalate of lime (CaO , $\text{CO} \times 2\text{Aq} = 82$) for the second, and substituting the value of x we will have

$$55:82::x:z.$$

The value of z will be the amount of oxalate of lime that was present in the specimen examined.

To illustrate by a case of actual analysis which required 13 measures to neutralize, we had the equation

$$45:55::,13:,158,$$

which represented the chloride of calcium present. Then

$$55:82::,158:,235,$$

which was the amount found in six ounces of urine, which was one-fourth of the amount voided in one day, making, 94 grains of oxalate of lime passed during that time.

We may, also, estimate the amount of oxalate of lime from the first equation, by substituting the atomic weight of that salt for the second term, as

$$45:82::,13:,235.$$

WESTERN JOURNAL OF MED. AND SURG.—This, the oldest Journal of the Mississippi valley which has had a permanent existence, comes to us in a new dress, and we see by the cover, is offered to subscribers at \$3 a year, *invariably in advance*. Since its origin, I believe in 1828, by the late Dr. Drake, and Guy W. Wright, the former of whom for a number of years was its editor, the Journal has been conducted with great ability. Prof. Yandell, who has conducted it for a number of years back, is still at his post, and impresses its pages with his learning, accuracy and usual industry. Having written for this Journal in years gone by, some four or five hundred pages, we can but feel an interest in its future fortune—*esto perpetua*.



STARLING HALL--COLUMBUS, OHIO.

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PART FIRST.

ORIGINAL COMMUNICATIONS.

ART. I.—*Uterine Polypi*. By THOMAS W. GORDON, M. D.,
Georgetown, Ohio.

CASE 1st. *History*.—In Dec., 1850, the husband of Mrs. D. called on me, stating that he wished my attendance in a few days, as his wife expected to be “confined.”

I heard nothing further from this case until the 9th day of February following, when Mr. D. again called and requested me to visit his wife, stating, at the same time, that she was extremely anxious about herself, as she had passed, (as she believed,) the full period of Utero gestation, and as yet there was no appearance of labor. From the testimony of the husband, I thought there might be uterine disease, and therefore took with me a vaginal speculum. On visiting this lady, I found a tall, spare woman of about twenty-five years of age, of a palish yellow hue, nervo sanguine temperament, mother of three children, apparently at the full period of utero gestation. She stated to me that about eleven months before this date her menses had ceased, and she supposed herself *enciente*,—that she began to increase in size, as heretofore at “such times,” and had continued to do so until within the last month. Since which time she could notice no change in herself.

She said she had not felt as she usually had when pregnant, not having the peculiar sensation produced upon the mother by the vivifying of the foetus. Yet she had felt a “kind of motion;” but gene-

rally, and perhaps always, only when she changed her position, "and not like life." She had felt but little anxiety about herself until within the last six weeks. Since which time she was much alarmed. I made an examination per vag. et rect. by touch, and per vag. by the speculum. Found the uterus thickened at the mouth and neck, instead of the obliteration of the neck, &c., as should have been the situation, if from pregnancy at full time. The mouth was slightly dilated, so that I very readily passed a sound into the cavity of the uterus, which seemed but little enlarged. From the exploration which I was able to make, I could detect a small tumour within. But it would not account satisfactorily to my mind for the increase in the volume of the organ. The size of the uterus was easily examined through the parietes of the abdomen. It varied but little, if any, in size from that organ in a majority of cases at the time of parturition.

I applied ext. Bel. freely to the Os. Tincae, and passed a small portion within the neck, and left for home, promising to return on the following day. Feb. 10th. Found the situation of my patient the same as yesterday, with the exception of the uterine dilatation. I could now easily introduce my four fingers into the neck of the uterus, and could detect a small polypus attached to the lower portion of the uterine fundus just above the neck. But I could not introduce the hand without giving rise to some pain. I therefore, desisted from further attempts, and again passed a sound within, and explored the uterus with very great care. I could, however, detect nothing but the small pediculated polypus. I then introduced the rod, (figured in Dr. Dewee's work on females,) armed with a ligature, and by the assistance of the fingers of the opposite hand, carried the ligature over the tumour to the pedicle. On tightening the ligature the polypus was immediately separated from its attachment, and dropped into the vagina. A slight hemorrhage ensued, which ceased immediately on the injection of a strong solution of tannic acid into the uterus. On examination, the tumor proved to be a polypus of an apparently condensed gelatinaform substance, as beheld without opening it. It was about three-fourths of an inch in its short diameter, and one and a fourth inches in its long, with a pedicle of not more than a half inch in length, and one and a half or two lines in thickness. Upon opening it with a knife, it seemed to be a homogeneous mass of a low grade of organization. Before opening, I thought it might possibly be a germ attached to its pecu-

liar location, from *some cause* or other. But upon the most minute examination by the naked eye, and also with a small microscope, I could not detect anything that seemed to agree with that opinion. The uterus partially contracted at the mouth, after the injection, but remained about the same in volume.

I placed this lady upon the use of Iodide of potassium, and sulphate of quinia, which she used for several weeks; the uterus gradually contracted to its natural size, and nine months and eighteen days from the day on which the polypus was removed, she gave birth to a robust, healthy boy. And on the 19th day of February, 1854, she was again delivered of a fine boy. Her labors were natural and easy. The uterus contracting immediately.

QUERIES.—How is the thickening of the walls of the uterus to be accounted for in this case?

There was hypertrophy and induration beyond a doubt. What caused it? and what restored the organ to its healthy state?

Did the subsequent pregnancy assist in removing the hypertrophy?

CASE 2d.—June 4th, 1852.

I was summoned to see Mrs. E., aged 38 years; nervo-sanguine temperament, the mother of several children. I found her reduced to syncope from uterine hemorrhage. No pulse perceptible at the wrist, and very slight at the elbow. She had had frequent attacks of hemorrhage for the several days last past; but supposed it would cease, until this evening, when the increase of the discharge produced such a loss of the powers of life, that the messenger informed me when he came, that those present thought it was doubtful whether she would be living when I arrived. On making an examination per vaginum, I found a uterine tumor extending downward from the os. uteri, with the os. drawn tightly around it like a cord, the tumor filling the vagina. On applying the hand upon the abdomen the uterus could not be felt, but with the introduced hand, I could plainly perceive the pulsation of three distinct arterial trunks at the tumor; knowing that she could not survive the loss of much more blood, I applied the tips of the fingers of my right hand upon the abdomen, (while the left was introduced per vaginum,) and pressed down upon the abdominal aorta, until the circulation was cut off, when the pulsation in the tumor immediately ceased. I retained my situation for some thirty or forty minutes, and then gradually removed the right hand, when I found there was no farther hemorrhage, and the lady gradually rallied.

The foetor from the tumor was so great, it required all the fortitude I was capable of commanding to endure it. I found, on inquiry, that this lady had complained of a tumor in the right lumbar region for the last two years, perceptible almost immediately after her last "confinement." That for some months she had not felt it as high as before; but that the foetor had been such the most of the time as to make life a burden. June 5th I made an examination per vag., found a large portion of the tumor had sloughed off. This I examined, (it having been kept until my arrival.) I found it to consist of a vascular reticulation, filled with coagulated blood, but in such a state of decay as not to be preservable. The uterus was partially inverted, and the remaining portion of the tumor attached a little to the left of the centre of the fundus; I passed a finger around the neck of the tumor, by gently dilating the ring like os. There was no farther hemorrhage. I ordered a Seidlitz powder, to be followed with an enema if it did not act.

June 6th. Made an examination with the speculum, found a dark or nearly black mass about the size of a common hen's egg, protruding from the os uteri, situated the same as on yesterday. I passed a finger entirely around the tumor at its attachment. I then introduced a guarded bistoury along my finger, and partially separated the tumor; I then used a strong styptic injection, (tannate of lead, or a solution of tannic acid, and acetate of lead, about as thick as good cream; I used this preparation simply because I had less of either than I thought necessary to use. Whether the combination was better than they would either have been singly I am unable to state.*) Still retaining my hand per vag. to notice any hemorrhage that might occur, there being none worthy of notice, I again carefully passed the bistoury (guided by a finger), to the neck of the polypi, and nearly separated it, when I again used the injection as before. After a few seconds I separated the remaining portion with my fingers; then used the styptic freely. I think there was not a half ounce of blood lost altogether in removing the tumor. After cleansing the parts thoroughly with warm water slightly astringent, I gave directions to use the strong astringent injection twice during the day, and almond oil at night.

7th. Found the uterus gradually assuming its natural position, the mouth notched where the tumor had apparently pressed the hardest.

* Since writing the above I met with Dr. J. B. Thompson, of Columbus, who informed me that he always used a similar combination of Tannic Acid and Plumbi Acetas.

The mouth much abraded in several places. No fœtor in the passages. Continue to use the astringent injection. I explored the uterus to-day with a flexible metallic catheter, which gave no indication of any other tumor.

8th. Patient is doing well. Says she feels better than she has for two years.

9th. Continues to improve ; use a tonic as follows :

R. Ext. Gentian,	3ij.
“ Colombo,	“
Feri Carb. Precip.	3ij.
Com. Tr. cardam.	“
Vini Galica,	Oj.

M. and shake well ; use a teaspoonful three times per day.

11th. Is sitting up a little to-day, and feels well, except from weakness.

13th. Is still better.

28th. She is now attending to light work.

The tumor (except that which sloughed off) was of an ovoid form with a very short pedicle, (indeed it was nearly sessile,) its size was :

Circumference of pedicel,	3	1-16 inches.
“ of lateral diameter,	3	15-16 “
“ of longitudinal “	4	3-16 “

Its structure was fleshy and vascular, being composed of venous and arterial trunks, quite small at their attachments to the uterus, but enlarged so that at the lower part of the tumor, the end of one of my little fingers could be introduced into some of the varicose veins. The arterial trunks were as large as a small goose quill. From this time on, Mrs. E. continued to enjoy reasonable health until in January, 1853, when she complained of great weakness, accompanied with leucorrhœa, frequently intermixed with a slightly bloody discharge from the vagina. An astringent solution was ordered to be used, with a female syringe. Also, a tonic bitter to give tone to her system. On the first of February she was violently attacked with dysentery, which, however, yielded to medication in a few days. The leucorrhœa, however, increased, with a larger proportion of blood and pus, in considerable quantities. On examination per vaginum, I found the mouth of the uterus, or rather its lips excoriated, and in several places deep ulcers, with red edges, while the

central part showed a whitish pustulated appearance. I cauterized the whole inflamed surface freely with Nit. Arg.; this I did several times, at intervals of a few days. And during the intervals a solution of tannic acid was used with the syringe as often as every second or third day, and tepid soft water, with castile soap, used once in two days, followed with an injection of almond oil each time.

On the 18th day of April, I removed another polypus, smaller than the one removed last year, but of a similar character. And on the 26th day of the same month, I removed a third polypus from the same female. This was larger than either of the former, weighing soon after it was removed nearly eight ounces, avoirdupois. I injected the uterus, after the removal of this tumor, at intervals, until the 13th of July, with *Tr. Sanguinaria Canadensis*, and tepid soft water. When the uterus, to all appearance, was perfectly healthy, the ulcers had all healed, and there was no farther appearance of leucorrhœa or discharge of any kind, except the healthy secretion of the organ.

This lady's health continued good from that time, with the exception of an attack of intermitting fever in September, and the sickness common to utero gestation; and on the 17th of May, 1854, she was delivered of a robust male child. On exploring the uterus at the time of parturition (which was necessary to remove the placenta) there was no appearance of a farther development of polypi.

CASE 3d.—Mrs. —; was called to see this lady on the 16th of September, 1852. Found her suffering as severely as the majority of women do during severe labor. Upon making "an examination," I found a tumor protruding from the Os. Tincæ. The uterus making strong efforts to expel it. There was at this time no hemorrhage. I had to be absent from the house for a short time, and left directions to call me immediately if any change occurred before my return. When I returned, which was within an hour, I found the polypus lying loose in the vagina; it is similar in shape and consistence to the first two removed from Mrs. E. It weighed $2\frac{3}{4}$ oz. avoirdupois. It is pediculated, but the pedicle was torn away by the expulsive efforts of the uterus. This lady was delivered of a healthy child within the last ten days.

June 12, 1854.

NOTE.—We have in our possession daguerreotype representations of the tumors described by Dr. Gordon, and at one time thought of having engravings made to accompany his paper; but after reflecting on the matter, it was thought that such a course would savor more of show than of utility.—[ED.]

ART. II.—*Abstract of the Proceedings with remarks, of the American Medical Association, at its 7th Annual Meeting, held at St. Louis.*
By S. M. SMITH, M. D., Columbus, Ohio.

The Delegates assembled on Tuesday morning, at the Verandah Hall, and in the absence of the President, Dr. Knight of New Haven, the Senior Vice President, Dr. Usher Parsons, of Providence, R. I., called the Association to order. Letters read from Drs. Knight and Beadle. On taking the chair, the Acting President congratulated the Delegates on assembling in such large numbers in the beautiful city of St. Louis, on the *west* bank of the Mississippi, to unite together in carrying forward the great objects of their organization.

The first business being the call of the roll, at the suggestion of Dr. MARCH of N. Y., it was agreed that each gentleman should rise and answer to his name. (The carrying out of this plan taxed the modesty of some gentleman, whose names were repeated several times, in rapid succession, as representatives of several societies, *un-constitutional* delegates from 23 States, and from the U. S. Army and Navy, were present.) About 110 societies, *State, District, County and City*, Colleges and Hospitals, were represented—whole number of delegates about 270, of whom the Treasurer reported, near the close of the session, from 220 to 230 as paying members, to whom only the proceedings would be sent when published, and their names appear in the record.

The Association being now fully organized, the Chairman of the St. Louis Committee of Arrangements, Dr. Washington, in the name of the St. Louis profession, welcomed the Delegates to the city and its hospitalities, expressing both their diffidence and their gratitude, the former being especially represented in the gentlemanly chairman.

The Reports of the Committee of Publication, and the Treasurer, were now read, and for the time being laid on the table ; when,

On motion of Dr. WHITE, of Buffalo,

Resolved, That a Nominating Committee, consisting of one member from each State, be appointed by the delegates of each State ; and, after a recess of 15 minutes, report the same to the Association.

When the following gentlemen were severally selected to constitute this committee :

Maine—Dr. Charles Millett.

New Hampshire—

Massachusetts—Dr. D. H. Storer.
Rhode Island—
Vermont—
Connecticut—Dr. P. G. Rockwell.
New York—Dr. L. P. White.
New Jersey—Dr. George R. Chitwood.
Pennsylvania—Dr. Rene La Roche.
Delaware—
Maryland—
Virginia—Dr. Adam Spitler.
Minnesota—Dr. J. H. Murphy.
North Carolina—
South Carolina—Dr. Thomas G. Prioleau.
Georgia—
Florida—
Illinois—Dr. W. B. Herrick.
Alabama—Dr. S. W. Clanton.
Louisiana—Dr. E. D. Fenner.
Missouri—Dr. Thomas G. Reyburn.
Michigan—Dr. William Brodie.
Mississippi—Dr. T. J. Grafton.
Iowa—Dr. D. Sevier.
Tennessee—Dr. J. B. Lindsley.
Wisconsin—Dr. J. B. Dousman.
Arkansas—
Texas—
Kentucky—Dr. Robert J. Breckenridge.
California—
Ohio—Dr. O. M. Langdon.
Indiana—Dr. W. W. Hitt.
U. S. Navy and Army—Dr. Pinckney.

This committee, having been approved by the Association, retired for the purpose of nominating officers for the coming year, viz: a President, four Vice Presidents, and two Secretaries, and a Treasurer.

On motion of Dr. ATLEE, it was,

Resolved, That the Association meet at 9 A. M. and adjourn at 1 P. M., for the morning session, and at 3 P. M. to 5 or 6 P. M., for afternoon session.

A motion by Dr. BRAINARD, that hereafter the meetings of the Association be held alternately in the Northern, Southern and Western portions of the Union, was discussed with some warmth, and finally laid on the table; the prevailing sentiment of the delegates being that it was preferable to make the selection from places *inviting* the Association.

On motion, adjourned until 3 o'clock P. M.

AFTERNOON SESSION OF TUESDAY.

Association met—Dr. Henry R. Frost of S. C., in the chair.

In the absence of the President, the Senior Vice President delivered the usual valedictory address. Though prepared upon so short notice, it was replete with good sense, and generous liberality, recommending that the meetings be carried from place to place, that their beneficial effects might be made available to the whole profession of the country. That it might, like the magnetic bar, passing over the heterogeneous mass, attracting the pure iron and steel, gather, by its successive proximity, the best material of the profession into one brotherhood, firmly united together for the common good. He alluded to the vast resources of the valley in whose centre we were meeting, and whose prospective development must make it the theatre of great events and great activity in all the departments of human progress, and expressed the hope that medicine would not be lag-gard in this rapid advance. That we might well take courage from what had already been done by Beaumont and Drake, Harrison and Caldwell, and many living and present, whom a proper delicacy would forbid him from complimenting as they deserve. A just tribute was paid to the memories of the many distinguished members of the Association who had fallen during the past year, dwelling upon the sad catastrophe at Norwalk.

It was referred to the Committee of Publication.

A letter was received from a permanent member, now residing in France, stating that he had presented the 6th vol. of Transactions to the Academy of Medicine at Paris, and that it had been received with much favor, and referred for examination and report to a committee of whom M. Velpeau was chairman. The letter expressed a hope that the five preceding volumes would be forwarded.

A memorial from the members of the Association in New York and vicinity, and those remaining after its last session there, adopted, at their meeting held immediately after the Norwalk dis-

aster, was presented and read. It stated that, at that meeting, a committee had been appointed to prepare memoirs of those who had been lost by that sad occurrence, which duty had been in part performed ; but being yet incomplete, it was recommended that, when finished, it should be forwarded to the Publication Committee, and be incorporated with the proceedings of this year.

Resolutions passed by the N. H. Medical Society, expressing a decided opinion that no delegate should be admitted to the American Medical Association who came from any Society that admits as members those who practice any form of empiricism.

Dr. Gross offered the following resolution :

Resolved, That hereafter it shall be considered highly improper and disorderly for the Association to give costly entertainments.

This gave rise to some discussion, but, with a slight amendment, finally passed.

The Committee on Nominations now made their appearance, and reported as officers for the ensuing year, the following gentlemen :

President,

CHARLES A. POPE, M. D., of Missouri.

Vice Presidents,

E. D. FENNER, M. D., of Louisiana.

N. S. DAVIS, M. D., of Illinois.

W. T. WRAGG, M. D., of South Carolina.

JNO. GREEN, M. D., of Massachusetts.

Secretaries.

E. S. LEMOINE, M. D., of St. Louis.

FRANCIS WEST, M. D., of Philadelphia.

Treasurer.

D. F. CONDIE, M. D., Do.

This report was unanimously accepted, and a committee of three were appointed to conduct the new officers to their seats.

Dr. POPE being absent on account of indisposition in his family, Dr. FENNER made acknowledgments of the honor conferred, regretting the absence of the President.

On motion, Philadelphia was fixed upon as the next place of meeting. Detroit had extended an invitation, but it was thought desirable to alternate east and west of the mountains.

Dr. CONDIE, being absent as chairman, forwarded the report of the Committee of Publication, to which were added certain resolu-

tions, recommended for adoption. The substance of these resolutions are, that the annual assessment be \$3 : That none be registered as members who do not pay, and that the different State organizations be requested to appoint committees at central and convenient points, to receive and distribute the volume of proceedings. After some discussion and modifications, the report and resolutions were adopted.

Dr. ATLEE, on behalf of the committee to procure a stone with a suitable inscription for the monument of Washington, reported that he had adopted, at the suggestion of the lamented Dr. PIERSON, of Salem, the design for the stone, representing HIPPOCRATES refusing the presents of King ARTAXERXES, who invited him to go to Persia and succor the enemies of Greece. The sculpture was on beautiful marble, by SAMUEL BECK, a young artist of Lancaster county, Pennsylvania, from a Daguerreotype copy of VIARDOT's celebrated picture, presented to him by Miss ABBY L. PIERSON. The execution of the work is in the highest style of art, and evinces extraordinary talents in the artist.

The Stone is of Vermont marble. The resolution authorizing the movement, was adopted at Richmond. There was a lack of funds for the accomplishment of this object to the amount of \$400, and Members of the Association were respectfully invited to contribute, as they felt inclined, to make up the amount.

On motion, Dr. CHARLES HOOKER was appointed Treastrer *pro tem.*, in the absence of the Treasurer *elect*.

It being announced that Dr. POPE was now present, he was conducted to the chair; and, after a feeling acknowledgement of the honor conferred on one so young, he accepted it in the name of the profession of the West, thus complimented through him, and at once entered promptly and efficiently upon the duties of his office.

A member announced that Dr. NINIAN PINCKNEY, of the U. S. Navy, was present; and, though not a delegate, would be glad, if permitted, to address the meeting. This request was acceded to, and the address, somewhat in the "Micauber" style, presented the acknowledgments of the Navy and Army to the Association, in establishing the medical officers of each service on a better footing, with a fair prospect of yet more important reformatations.

Invitations from the Hon. L. M. KENNETT, Mayor of the city, and Drs. MOORE, McPHEETERS and REYBURN, were given to the members of the Association, to partake of the hospitalities of their homes, dur-

ing the evening. Also, invitations to visit the different public Institutions of the city.

A resolution was adopted authorizing the Nominating Committee to appoint other committees that might be needed during the session, or for the ensuing year.

On motion, adjourned until 9 o'clock to-morrow morning.

WEDNESDAY, SECOND DAY'S PROCEEDINGS.

The Association met at 9 o'clock. Dr. POPE in the chair.

Minutes of yesterday read, and after a few slight corrections, adopted.

The Committee of Registration reported additional delegates, and recommended a number of members by invitation. All accepted.

On motion, the meeting agreed to adjourn to 4 o'clock P. M.

A memorial from the American Medical Society of Paris, signed by Dr. Hammer, of St. Louis, and Dr. Murphy, of Cincinnati, was read, and, on motion of Dr. ATLEE, of Pa., was referred to the Committee of Medical Education.

Memorial of the American Medical Society of Paris, to the American Medical Association.

We, the members of the American Medical Society of Paris, beg, through our delegate, to present the following memorial :

The National Association of the United States has had its origin mainly from the consciousness felt by physicians of the low state of medical education in our country, and from the desire universally entertained by them of elevating the standard of the medical profession. We, by our sojourn abroad, from our intercourse with those educated here, have become more painfully conscious of our infirmities and deficiencies at home, and for this reason beg leave once more to urge upon the Association the necessity of a change. While acknowledging, however, the superiority of education in Europe, we are far from desiring to arrive at equality by imitating their methods. We, therefore, beg to urge the following plan for the consideration of the Association : That in each State there be appointed by the Medical Society of the State, a Board of Examiners, which Board shall be chosen every year from members of the Society, and which shall perform its duties the following year in the place, and immediately before the sitting of the State Medical Society ; that their examinations be public, and that every one whomsoever may apply, who shall be introduced by a member of the Society ; and that no one

can hereafter become a member of the State Medical Societies nor of the American Medical Association, who has not the certificate of having satisfactorily passed such an examination. As to the qualifications to be required of the candidate, we do not think it advisable to enter into particulars. They should not, however, believe in any peculiar doctrines or methods; no certificates of attendance upon courses of lectures should be necessary, but solely the possession of the necessary amount of medical knowledge to practice his profession with safety and honor. This plan in no way interferes with the established schools; its effect upon them could only be salutary. Students would attend those institutions where those branches of a medical education, that can only be acquired by attendance upon lectures, are best taught.

All of which is respectfully submitted to the consideration of the Association.

Dr. HAMMER, St. Louis.

Dr. MURPHY, Cincinnati.

The President now announced that the reading of the Annual Reports of the standing committees would now be in order, when the following gentlemen were called upon :

Dr. CONDIE, of Philadelphia, on causes of Tubercular diseases, not present, and not prepared.

Dr. GEO. B. WOOD, of Philadelphia, on diseases of parasitic origin, not present, asked to be excused from further consideration of this subject. Granted.

Dr. JNO. A. ATLEE, of Lancaster, Pa., on epidemics of Pennsylvania, Maryland, New Jersey and Delaware, but partially prepared, asked for further time, and made some statements showing the difficulties attending this class of reports. Appealed to members, &c.

Dr. D. J. CAIN, of Charleston, S. C., on Epidemics of South Carolina, Florida, Georgia and Alabama, transmitted a brief abstract. Referred to Committee of Publication.

Dr. W. L. SUTTON, on Epidemics of Kentucky and Tennessee, made a partial report. Referred to the Committee when finished.

Dr. GEO. MENDENHALL, of Cincinnati, O., on Epidemics of Ohio, Indiana, and Michigan, made a report on 1852 and '53, of which he read a brief abstract. Referred to Committee of Publication, with request that it be published.

Dr. R. S. HOLMES, of St. Louis, on Epidemic Erysipelas, read abstract—took the ground that a depressing cause originated the dis-

ease, and might be internal and external ; but *asthenia* characterized the disease, only invaded tissues similar in ultimate anatomical structure, mucous membrane, skin and serous membrane, &c. Treatment, &c., inferable from this condition.

Dr. E. D. FENNER, on Epidemics of Louisiana, Mississippi, Texas and Arkansas. Not fully prepared—but read a synopsis of what he intended to prepare. Ordered to be referred to Committee of Publication to be published. The synopsis dwelt chiefly on CHOLERA and YELLOW FEVER, especially the latter, advocating the local origin, non-contagious character. Treatment—*Quinine*, &c.

Dr. R. D. MUSSEY, of Cincinnati, made a motion to suspend the regular business, to allow Dr. LINTON, of St. Louis, to give his views on the pathology of YELLOW FEVER. These were, that vegetable decomposition was not necessary to the production of autumnal fevers of this country ; that Yellow Fever was only an aggravation of simple Bilious Fever—both caused by the retention of hydro-carbonaceous matters in the blood. Yellow Fever was produced by *northern blood*, subject to heat of southern latitudes, &c. &c.

A motion was made and carried, that Dr. LINTON be requested to draw up the substance of his remarks and present them to the Committee of Publication.

Dr. D. BRAINARD, of Chicago, on the constitutional and local treatment of Carcinoma, requested further time.

Dr. N. S. DAVIS, on influence of *local* circumstances on the origin and prevalence of Typhoid fever, read a brief abstract, advocating the sources of the fever, were either from *without* or *within*, that retained morbid matters, deranging the functions of particular organs, gave rise to fever,—in this condition external *local* causes, were efficient—non-contagious, &c.

Dr. DONALDSON, of Baltimore, on present and prospective value of the microscope in disease. Dr. D., not being present, but the paper being completed, it was referred to the committee of Publication.

Report of committee of Medical Education, also referred to same committee without reading.

Dr. POPE, chairman of the committee on Prize Essays, and volunteer communications, made the following report :

Mr. PRESIDENT : The committee on Prize Essays and Volunteer Communications, respectfully report that the Essays submitted to their consideration were nine in number, of which one was presented

as a volunteer communication. The committee have carefully examined the whole of these Essays, and bestowed upon them the attention which a sense of the importance of the duty assigned them imposed. They feel free to say that some of these essays possess undoubted merit, both in matter and style, and they admit in them evidence of high scientific attainment, as well as a familiarity with the graces of composition. But whilst, cheerfully, according these claims to their authors, the committee have preferred to be governed in their choice by considerations of originality and practical import, rather than of mere theoretic speculation, however finely portrayed. The committee, have, consequently, concluded to award but a single prize. The essay selected is entitled "An Essay on a new method of treating Ununited Fractures and certain Deformities of the Osseous System." It bears a motto in French, which, being liberally rendered in modern English, reads, "and notwithstanding all the pains I have heretofore taken, I have reason to praise God, in that it hath pleased Him to call me to that branch of Medical practice commonly called Surgery, which can neither be bought by gold nor by silver, but by industry alone and long experience."

If it please the Association, I will now break the seal of the packet superscribed by the same motto, and declare the name of the successful competitor.

Dr. POPE then broke the seal, and announced the name of Professor BRAINARD, of Chicago.

Dr. MCPHEETERS moved that Professor DANIEL BRAINARD take the stand, and give the Association an abstract of his new mode of treating fractures, &c., which motion was carried, and Professor BRAINARD accordingly came forward, and in an able manner gave the requisite information.

Dr. HOOKER, Treasurer, *pro tem.*, nudged the members to pay their dues, &c.

Dr. ELBERT, offered resolutions, appointing a committee to prepare some modification of the constitution and by-laws, by which officers, and the place of meeting would be selected by ballot, without intervention of the Nominating committee—*lost*.

Dr. GUTHRIE, offered the following resolution, which was unanimously adopted.

Resolved, That in the Secretary of the Treasury's recommendation to Congress to abolish, or materially modify the duty on such crude drugs not producible in this country, as are used in our laboro-

ratories, in the manufacture of chemicals, we recognize a wise provision for the further protection of the profession, and the community at large from impure and sophisticated medicines.

A copy of which was sent to the complimented Secretary.

Dr. STEPHEN WILLIAMS, formerly of Deerfield, Massachusetts, now of Illinois, addressed a letter to the association, enclosing the following resolution:

Resolved, That a standing committee be appointed by this association, to procure memorials of the eminent and worthy dead, among the distinguished physicians of our country, and present them to this association for publication in their transactions. Adopted, and a committee afterwards appointed.

Dr. McILVAINE, offered the following:

Resolved, That, in the opinion of this association, the practice of Professors reading lectures to their classes, no matter with how much care selected from the musty records of antiquity, is a miserable apology for teaching, and prima facie evidence of their inaptness to instruct, and is inimical to medical progress.

On motion, it was laid on the table, without discussion, except by the author.

Dr. FRENCH, offered the following:

Resolved, That a committee be appointed to inquire what State, or other society, represented in this association, is in fellowship with irregular practitioners.

Dr. BLATCHFORD, read a communication from Dr. Spore, of New York, who had been investigating the subject of Hydrophobia, and requested communications on the subject.

On motion, Dr. Blatchford was appointed chairman of a committee. Dr. S. not being a delegate.

Dr. McDOWELL, offered the following:

Resolved, That a committee be appointed to investigate the improvements of the instruments for Lithotomy, by Nathan R. Smith, Paul F. Eve, and Dr. McDowell.

On motion, laid on the table.

Dr. S. M. SMITH's resolution for appointing a committee on Insanity, carried.

It was now announced, that conveyances would be at the Hall door, this P. M. at 4 o'clock, to carry the members to the residence of Col. O'Fallen. Adjourned until 3 o'clock.

Association met at 3 o'clock.

Dr. WHITE moved a vote of thanks to Dr. Knight as late President of the association, &c., and requesting him to furnish the usual address for publication. Carried.

The committee appointed to devise or consider some comprehensive plan for the more general, systematic and thorough investigation of subjects connected with medical science, reported, appending the following resolution:

Resolved, That the American Medical Association hereby recommends all Medical Societies to establish, in accordance with the plan detailed in the foregoing report, special committees for the selection, investigation, collaboration and publication of all subjects connected with medical science. Adopted, and the whole referred to committee of publication.

Dr. N. S. DAVIS, read a report on the adulterations of milk as it is sold in our cities, and exhibited specimens, and recommended that the association take the subject under consideration.

On motion, the association adjourned, until 9 o'clock, to-morrow morning.

This evening, the members of the association with a large number of invited guests made a visit to the country seat of Col. O'Fallen a few miles from the city, and spent several hours rambling over his beautiful grounds, and in the evening partook of a sumptuous entertainment.

THIRD DAY'S PROCEEDINGS.

Thursday, 9 o'clock, A. M. Association met. President in the chair. A vacancy existing in the nominating committee from Iowa. Dr. McGugin was chosen to fill it. Minutes read, corrected and adopted.

Dr. MCPHEETERS, stated that arrangements had been made with all the railroads to carry delegates home free of charge, and that all the railroad companies had agreed, except the New York and Hudson River Company. Delegates found that, from some cause, this "arrangement" did not amount to any thing, unless it be a little disappointment and bad blood, and all the companies on the northern route had heard nothing of it, or feigned profoundest ignorance.

Dr. ATLEE, offered the following:

Resolved, That it be the duty of the Publication committee, to append to each volume of the transactions hereafter published, a copy of the constitution. Carried.

Dr. GROSS, offered the following :

Resolved, That a committee of one be appointed by the chair, to inquire into the causes which obstruct the formation of an establishment of our national medical literature, and report on the subject at the next annual meeting, or as soon thereafter as practicable. Dr. Gross was appointed said committee.

Invitation from Thos. S. O'Sullivan, Esq., the President, Engineer and Superintendent of Pacific Railroad, inviting the Association to go out some miles on the Pacific Railroad. Accepted, and to-morrow morning at 10 o'clock agreed upon.

Dr. LINDSEY offered a resolution, in reference to the abrogation of the rule of some schools, allowing four years' practice, as equivalent to a course of lectures. Referred to the committee of medical education.

Dr. PAUL F. EVE, submitted the following :

Resolved, That a committee of three be appointed by the chair, to report at the next meeting of the Association, the best means for preventing the introduction of disease into our country by emigrants. Committee, Drs. Dickson, Griscum and E. D. Fenner.

Dr. LINTON, *Resolved*, That in the opinion of this association, quarantine establishments afford no protection to States and cities, against the invasion of such epidemics, as Cholera and Yellow Fever. Referred to same committee.

Members of committee of arrangements were admitted as members of association by invitation.

Dr. JAYNE, *Resolved*, That the memorial from Drs. Hammer and Murphy be withdrawn from the committee on Medical Education.

He contended that the imputation on American Schools and Teachers implied in the document, should not be endorsed by this body.

Drs. Atlee, Elbert, McIlvain, Edgar and others, made remarks, during which statements were made by the last two gentlemen, the authority for which they declined giving. After some discussion, the resolution was carried by a large majority, and the memorial was laid on the table.

Dr. PEEBLES, of Virginia, at his own request, was excused from acting as chairman of the committee on epidemics of Virginia and North Carolina.

The regular business was now suspended to hear the report of the nominating committee, when, the following report was made :

REPORT OF THE COMMITTEE OF NOMINATIONS.

The Committee on Nominations, in fulfilling the duty imposed upon them, recommend the continuance of several of the special committees previously created, and the appointment of some new ones. They, therefore, submit the following list of Chairmen of special committees, with the subjects to them committed :

Dr. Worthington Hooker, of New Haven, Connecticut, on epidemics of New England and New York.

Dr. John L. Atlee, of Lancaster, Pa., on epidemics of New Jersey, Pennsylvania, Delaware and Maryland.

Dr. D. J. Cain, of Charleston, S. C., on epidemics of South Carolina, Florida, Georgia and Alabama.

Dr. W. L. Sutton, of Georgetown, Ky., on epidemics of Tennessee and Kentucky.

Dr. Thos. Reyburn, of St. Louis, Mo., on epidemics of Missouri, Illinois, Iowa and Wisconsin.

Dr. Geo. Mendenhall, of Cincinnati, Ohio, on epidemics of Ohio, Indiana and Michigan.

Dr. E. D. Fenner, of New Orleans, La., on epidemics of Mississippi, Louisiana, Arkansas and Texas.

Dr. James Jones, of New Orleans, La., on the mutual relations of yellow and bilious remittent fever.

Dr. D. V. Condie, of Philadelphia, Pennsylvania—on the causes of Tuberculous Disease.

Dr. Jos. Leidy, of Philadelphia, Pa., on diseases of Parasitic Origin.

Dr. A. P. Merrill, of Memphis, Tenn., on the Physiological Peculiarities and Diseases of Negroes.

Dr. Jos. N. McDowell, of St. Louis, Mo., on Statistics of the operation for the removal of Stone in the Bladder.

Dr. F. P. Porcher, of Charleston, S. C., on the Toxicological and Medicinal properties of our Cryptogamic Plants.

Dr. Daniel Brainard, of Chicago, Illinois, on the Constitutional and Local Treatment of Carcinoma.

Dr. Geo. Engleman, of St. Louis, Mo., on the Influence of Geological Formations on the character of disease.

Dr. Henry Taylor, of Mount Clemens, Michigan, on Dysentery.

Dr. Horace Green, of New York, on the use and effect of applications of Nitrate of Silver to the Throat, in Local or General Disease.

Dr. P. G. Gooch, of Richmond, Va., on the administration of Anaesthetic Agents, during Parturition.

Dr. Chas. Hooker, of New Haven, Conn., on the Diet of the Sick.

Dr. E. R. Dabney, of Clarksville, Tenn., on certain forms of Eruptive Fevers, prevalent in Middle Tennessee.

Dr. Sanford B. Hunt, of New York, on the Hygrometrical state of the Atmosphere in various localities, and its influence on health.

Dr. Frank H. Hamilton, of Buffalo, New York, on the Frequency of Deformities in Fractures.

Dr. M. M. Pallen, of St. Louis, Mo., on Diseases of the Prostate Gland.

Dr. H. A. Johnson, of Chicago, Illinois, on the Excretions as an Index to the Organic Changes going on in the System.

Dr. Leroy H. Anderson, of Sumpterville, Alabama, on Typhoid Fever and its Complications as it prevails in Alabama.

Dr. W. H. Byford, of Evansville, Indiana, on the Pathology and Treatment of Scrofula.

Dr. N. S. Davis, of Chicago, Illinois, on the Nutritive Qualities of Milk, and the Influence produced thereon by Pregnancy and menstruation in the human female, and by pregnancy in the cow, and also on the question whether there is not some mode by which the nutritive constituents of milk can be preserved in their purity and sweetness, and furnished to the inhabitants of cities in such quantities as to supersede the present defective and often unwholesome method of supply.

Dr. E. B. Haskens of Clarksville, Tenn., on the Microscopical Investigations of Malignant Tumors.

Dr. Geo. K. Grant of Memphis, Tenn., on the Sulphate of Quinia as a Remedial Agent in the treatment of Fevers.

Dr. R. R. McIlvain of Cincinnati, Ohio, on the study of Pathology at the bedside.

Dr. E. S. Cooper of Peoria, Illinois, on Orthopædic Surgery.

Dr. Andrew F. Jeter of Palmyra, Mo., on the Modus Operandi of Envenomed Secretions of healthy Animals.

Dr. Sam. M. Smith of Columbus, Ohio, on Insanity.

Dr. Rene La Rouché of Philadelphia, Penn., on the Jaundice of Yellow Fever in its Diagnostical and Prognostical Relations.

Dr. Charles Chandler of Rocheport, Mo., on Malignant Periodic Fevers.

Dr. S. B. Chase of Portland, Maine, on Typhoid Fever in Maine.

Committee on Plans of Organization for State and County Societies—A. B. Palmer, M. D., Michigan ; R. R. McIlvain, M. D., Ohio, D. L. McGugin, M. D., Iowa ; E. R. Peaslee, M. D., New Hampshire ; Thos. Lipscomb, M. D., Tennessee.

Committee on Medical Literature—Robert J. Breckenridge, M. D., Kentucky, chairman ; A. A. Gould, M. D., Massachusetts ; D. L. McGugin, M. D., Iowa ; J. B. Flint, M. D., Kentucky ; O. M. Langdon, M. D., Ohio.

Committee on Medical Education—Wm. H. Anderson, M. D., Alabama ; A. Lopez, M. D., do. ; Andrew Murray, M. D., Michigan ; A. Ramsay, M. D., Tennessee ; R. D. Ross, M. D.

Committee on Prize Essays—Rene La Roche, M. D., Pennsylvania ; Isaac Hays, M. D., do. ; Alfred Stills, M. D., do. ; J. B. Biddle, M. D., do. ; Geo. W. Norris, M. D., do. ; Joseph Carson, M. D., do. ; Joseph Leidy, M. D., do.

Committee of Arrangements—Isaac Hays, M. D., Pennsylvania ; G. Emerson, M. D., do. ; Wilson Jewell, M. D., do. ; Alfred Stille, M. D., do. ; Francis West, M. D., do. ; William V. Keating, M. D., do.

Committee on Publication—Pliny Earle, M. D., New York ; D. Francis Condie, M. D., Pennsylvania ; E. S. Lemoine, M. D., Missouri ; A. March, M. D., New York ; E. H. Davis, M. D., do. ; C. R. Gilman, M. D., do.

After the reading of the report, Dr. REYBURN moved its adoption, excepting that portion referring to the Committee on Publication, in the following resolution :

Resolved, That the said report be adopted, with the exception of that portion which refers to the Committee on Publication.

After the reading Dr. REYBURN, moved its adoption, except so much as referred to the committee of Publications—upon which the warmest discussion of the session occurred, the contest being on the appointment of the committee, that should determine the *place* of publication, New York or Philadelphia.

During the progress of the discussion, in which Drs. REYBURN, JAYNE, STORER, MCPHEETERS, EVE, HERRICK and others engaged, the whole merits of the indefatigable Philadelphia committee, who had served so faithfully, with Dr. CONDIE at their head, were fully recognized ; yet many preferred that a change should be made, not implying censure, but to divide honors and labors. After sometime spent in presenting the merits of both cities and sides, the Associa-

tion, on motion of Dr. JAYNE, went into committee of the whole, Dr. ELBERT of Iowa, in the chair, when the discussion was renewed with yet more zeal.

After some hours, the committee of the whole rose and reported back the amendment of Dr. REYBURN, when the Association adjourned.

AFTERNOON SESSION.

Association met at 3 o'clock, Dr. POPE in the chair.

Dr. STORER's resolution making none permanent members but those who paid up their dues, was adopted.

Dr. ATLEE offered the following:

Resolved, That this Association earnestly recommend to their brethren in those States where Societies do not exist, the immediate organization of State and County Medical Societies. Adopted.

Dr. BRECKENRIDGE—That the papers and documents, and plates used for illustrations of this Association, shall be the exclusive property of this Association. Carried.

Dr. PHELPS of N. Y., now read an essay, the reading of which had been deferred to hear the report of the Nominating Committee, on this subject, "Religion an Element in Medicine, or the Duties and Obligations of the Profession."

Referred to a special committee, Drs. ATLEE, JAYNE and MARCH, a graceless set to take charge of the little religion of the Association.

A motion was now made to proceed to the regular business, which brought up the resolution of Dr. REYBURN, as adopted by the committee of the whole, when on motion of Dr. EVE, to refer the whole matter back to the Nominating Committee, which was lost, then the question came up on adopting the original report. This elicited a warm discussion, during which some personal and sectional feelings were evinced; but the original report was finally adopted by a moderately decisive majority.

When the vote was announced, the Philadelphia delegation announced, through Dr. LA ROCHE, that they would take the responsibility of tendering the resignation of Dr. CONDIE, of Philadelphia, as Treasurer. After some little discussion and an honest expression of regret, it was accepted.

Dr. WEST, one of the Secretaries, tendered his resignation; but it was not accepted.

Dr. BRECKENRIDGE now offered a resolution: That hereafter a majority of the Publication Committee shall be selected from the

Physicians of the city where the Association may annually meet. Carried.

A vote of thanks was then unanimously returned to Dr. CONDIE, for the able, impartial and zealous manner in which he had discharged the duties of Treasurer, and the same to the whole Publication Committee, Dr. PINCKNEY, of the U. S. Navy, and the citizens of St. Louis.

Dr. MUZZEY was appointed a committee of one on alcoholic drinks.

The Nominating Committee reported Dr. HOOKER, then Dr. BLACKFORD, and finally, Dr. WARD, of New York, as Treasurer. Dr. HOSKINS, of Va., Ch. Com. Epidemics of Va., &c.

Dr. EDGAR offered a resolution recommending apothecaries to use different colored paper to designate poisons, &c.

Dr. ENGLEMAN declined to serve as a committee to report geological formations on disease. Not accepted.

Dr. GROSS announced that Dr. DRAKE'S work would be published during the summer, the forthcoming volume, containing all his articles on the diseases of the "Valley."

After some unimportant business and votes of thanks, the Association adjourned.

ART. III.—*Report of a peculiar and fatal case.* By J. H. CLARK, M. D., Mutual, Ohio.

Feb. 6, 1854, morning, was called to visit Mrs. A.'s babe, aged 13 months. Nervous temperament, weak constitution—ill and presenting the following symptoms, viz: Pulse accelerated and irregular, countenance flushed, skin hot and dry, tongue coated with a layer of white mucus, but red at its tip and edges; nausea and vomiting of a yellow fluid, and of a sour and offensive smell; bowels constipated, cough, respiration accelerated and abrupt, gums swollen and tense, morbid appetite, nursing greedily.

Diagnosis.—Irritation of the lungs and stomach, with a tendency to the brain, from dentition and cold. Scarified the gums, gave a portion of Rheum. and Calc. Magnesia, and used the warm bath.

In four hours was recalled. Symptoms more aggravated, heat of the body increased, eyes rolling in their sockets with dilated pupils, active moving of the extremities, grinding of the teeth, in short showing a tendency to convulsions.

Gave a more active cathartic, warm pediluvia and cold to the scalp. Returned in 4 hours—physic had operated well—child been vomiting and had rejected a bloody mucus matter (confirming my former diagnosis of present irritation of the stomach,) and inclining to coma. Again ordered the warm bath and the use of Aqua Calsis and Magnesia, to allay vomiting. Coma increased through the night.

Feb. 7. Symptoms still more alarming. Congestion of the lungs more apparent, skin dry, countenance pallid and anxious, pupils still dilated, features apparently swollen, pulse frequent and irregular. Prescribed Mild Chlo. of Mercury, minutely combined with Ipecacuanha, alternated with the Spirit of Squills. Com., warm bath, Mustard Sinapism on the nape of the neck and feet, and thus continued through the day and night.

8 A. M. Respiration better, a tendency to perspiration, pulse diminished in frequency, and roused from its comatose state for a short time, but soon relapsed again and continued through the day. While about noonday a slight cutaneous eruption, in the form of a rash, made its appearance over the neck and chest, but soon subsided and convulsions supervened, with spasm of the right and paralysis of the left side. These convulsive paroxysms were of short duration, with corresponding intervals of coma, and thus continued through the night.

Used the warm bath, cold to the scalp, antispasmodics, blisters behind the ears, and moved the bowels with an *enema*; they being torpid.

Feb. 9. Convulsions less violent, but of longer duration, with intermissions less complete—there being constant subsultus tendinum, and with a reduction of the physical power; the patient continued to nurse freely.

Treatment continued as before.

Feb. 10. Coma partially subsided, with increased nervous irritability and slight convulsive paroxysms through the day; at times respiration difficult and deglutition impaired for the first time during the illness, the scalp now tumefied, the tongue now freed from its coating and presenting a congested appearance. The above treatment continued.

Feb. 11. Paroxysms more mild and longer intervals, but increased coma. The flush on the cheeks and redness of the chest an occasional visitor, cough less frequent and more easy. But little medication.

Feb. 12. General tumefaction of the scalp subsided, the pupils become contracted, the nose pinched, the lips congested, respiration hurried, the child apparently struggling against death's grasp for a short time, but revived and again presented a very irritable condition of the nervous system—the least disturbance throwing it into a spasm. Renewed the sinapism to the extremities, the discharge kept up behind the ears.

Feb. 13. No marked difference from the preceding day, save increased spasm of the larynx, increasing the difficulty of respiration, causing a peculiar prolonged hissing sound, as in spasmodic croup. The general spasm subsisting for a short time, the patient apparently passing the interval in a comatose condition, with rigidity or tonic spasm of the muscles of the extremities and strabismus present.

Feb. 14. Occasional violent spasmodic paroxysm, subsidence of the swollen features, cold extremities, a feeble thread-like almost imperceptible pulse, respiration more slow, interrupted and gasping, and death soon closing the scene.

Now the peculiarities of the case, were its frequent change of category, or change of predominant symptoms.

PART SECOND.

AMERICAN AND FOREIGN INTELLIGENCE.

ART. I.—*The First Years of Practice.*

[THE address to the graduating class of the New York Medical College, by Dr. Frank Tuthill, one of the Censors, and more extensively known of late as one of the editors of the New York Daily Times, is published in full in the columns of that paper. We select some portions of it for the perusal of our readers, as the address may

be read with interest and profit not only by the young graduates of New York, but by practitioners of all ages, and in other places.]

Dr. TUTHILL congratulated the graduates upon the honors, rights, and privileges to which they had attained. They had swam a river whose depth was not vouchsafed them, nor its width more than guessed at. Like poor Christian, they had climbed the hill Difficulty, and, whether frightened or not, passed by the lions, which proved to be chained. It cannot but be an occasion of rejoicing, in view of the difficulties overcome. But the laughter ceases without the echo, remembering that there is a valley of Humiliation just ahead, and several Apollyons dripping blue and melancholy hours from their wings, stretching across the pathway. The Apollyons are great cowards, however, before well-furnished men: and this humiliation is wholesome.

A year hence all these terrors of beginning will be matters of mirth. They will seem as ludicrous as the fright of one who has stood shivering and trembling all the dark night on the bank of what seemed a turbulent river, but which proved, by daylight, to be a mere rill rattling, not ankle deep, over its pebbly bed.

A great change has come over them during the hour—for the metamorphosis from the condition of a lively, rollicking, thoughtless medical student, to that of a grave and reverend physician, upon whom are rolled the responsibilities of the life and death of his fellow men, is most marvellous and vital. Whereas, when a student, he gloried in the tenderness of his youth, now he delights in the few marks that age has made upon him. Is there among his locks a whitened hair—tenderly regard it, so arrange the whole that it shall be sure to be observed. Is there a wrinkle or furrow on his face—cultivate it, for with age alone the people think that there is wisdom. And when he leaves his alma mater, and strikes out into the world, how subdued and nervous he seems for awhile! Sitting in his office, on the exterior of which is nailed the newly-painted shingle which announces his profession, how he looks from book to bottle, from manikin to mortar, shivering lest the step on his stair-case should be a call for him—hoping that it is, yet dreading it. It approaches—a knock—it is only the Squire, called to say how glad he is that a good doctor has come to settle with them. He employs the “old doctor” himself, he says, but he will be glad to have him vaccinate the children, and will do all he can to help him; then, crack-

ing a few stale jokes about the "distressingly healthy state of the village," leaves, thinking he has left a deal of consolation. When the young doctor makes his first call, how the words, that were wont to rush out so fluently, cling to his opened lips! how he watches the friends about the sick one's bed! how he looks into the eyes of his patient, seeking sympathy there in his embarrassment! how he envies the imperturbability of the old nurse, sitting at the bed's head, with a pinch of snuff between thumb and finger, and all the importance of her conscious experience written in her face. No wonder, when he is arranging for his first venesection—no wonder his hand trembles, as he plunges the lancet—for several pairs of eyes are watching him—microscopic eyes that render his trembling into violent shakings. No wonder, when he fixes his forceps at the extraction of his first tooth, he wrenches off the crown, leaving what seem like bottomless roots, still aching in the jaws; for, if there are not half a dozen men standing by to observe how much tact or lack of it he exhibits, yet the reflection that the slightest want of success will, before bed-time, be talked over in parlor and kitchen, apologized for by some of the young and amiable, talked of at the post-office, and in the shoe-shop, discussed at tea-tables and at the bar, in the village store, and by the ruddy light that illumines the dusky premises of the swarthy smith. Then, when his first fever case presents itself, how immensely distant, like planets in their orbs, are the critical days!--how the different stages seem to last through ungrown eternities!--how, from day to day, he watches for one change of symptom, almost consenting, at times, that the change should be for the worse, rather than not come at all; how he blames himself for not curing incurables, and that he cannot break fevers; how he anticipates the complaints of friends, complaints they never will utter, and feels that he might almost be treated as an enemy, because his friendship has proved so long unavailing; how tedious is the convalescence; how he thinks that a dozen times the amount of his bill he would gladly pay, to see the invalid walking about again in the fullness of his strength, perfectly cured; how ashamed he grows to be seen visiting the house, and is tempted to reach it by back-ways and by-paths. All this time, the "old doctor," his rival, swells twice or thrice a-day through the village to the house of a neighbor not half as sick, without exhibiting a trace of care about the tediousness of the convalescence, reckons that she is doing well enough, and to the urgent demand for a medicine to relieve this symptom, or

to ease that pain, tells them to "wait! Nature is doing the job," and asks the old farmer, "What is the price of potatoes?" But the young man's peculiar province it is to chide himself that he cannot break fevers, stay the course of epidemics, set the bed-ridden on their feet, cure chronic rheumatism in a day, and disguise with perfect confidence where old experience would cheerfully confess his ignorance.

But, said Dr. Tuthill, there are some great privileges pertaining to this stage of the doctor's life. The sound of the mortar heard in his room, is to his credit, and it is all the same whether he is grinding spices for his landlady's accommodation, or dried herbs and chemicals for his pills. Seen dimly through his shaded window, peering over a book, they say that he is *studious* and learned, whether the volume he reads is "Bulwer," or "Broussais," "Dickens" or "Dunglison," "Cowper" or "Cooper." Seen writing at his desk, he gets credit for an intelligent student or an author; and it is all the same whether he is making his sparse receipts equal the bill of his expenses upon the balance sheet, noting his cases, or writing a tale for some literary monthly. It is pleasant to see how, if he is grave by nature, his gravity is set down to thoughtfulness, and when, with a long face, he sits building fine castles in the air, they say that he meditates the state of his patients, and is turning over the value of different medicines in their behalf. If he is cheerful and happy, and something of a rattle-head, his presence they say is a tonic, and a few moments of his conversation soothes pain like an anodyne.

These leisure seasons of early practice ought to be appreciated by physicians. It is the time when by reading up the cases that occur, the experience of ancients and moderns may be digested and wrought into his own. If he has an ambition for discovery, he can fit himself for it, by reading up what is already known, and making himself familiar with the lands and the skies already mapped. It is the time for one to arm himself to meet and to vanquish the pretentious humbugs of modern times: most of which have wheeled out the brief circle of their popularity before now—been respected, ridiculed, buried, and now risen again to run the same round.

The wits and the wags, said the doctor, have laid down a great many rules for getting into practice, and generally at the expense of the doctors. "There are two ways, my boy," said Radcliffe to Mead his successor, "for a physician to treat his patients—either to

bully or cajole them. I have taken the former course, and have done well, as you see. You may, perhaps, take the latter, and perhaps do equally as well." Be careful, say the advising wits, to learn the *form of prescribing*, since form is the main chance. Make your name ring in the town: it little matters how, so only that this point be secured, that when your name is proposed in consultation, there shall be none so ignorant but will confess they have heard it. Buy a mountain of books, and be sure that none of them be left in secluded parts of the house. Or, if you have not the money to buy the mountain, let the few do good service, even as our famous Yankee General Putnam made his lean score of soldiers march up over the verge of the hill so often that the terrified enemy reported a force of many hundred strong; and never omit mere mention, where it will tell, of "the library" from which these are brought out for immediate use, it being altogether too large to be kept in so small an office.

Don Quevedo advises physicians to get in debt to everybody, as then everybody must employ them to save their debts. But, said the speaker, it is doubtful if all these genteel modes of quackery have not been already overdone. The policy of being called out of church no longer avails. Managing on Sabbath morning to meet the stream of church-goers, probably, does not pay for horse-hire. "Give me all the fools for patients, said a mountebank to Radcliffe, "and you may take the rest," but the majority of the fools has been sadly diminished of late. Honesty in getting into practice is the best policy after all, though where they had no free schools, no free academies, no free libraries, and no daily newspapers, it may have been different. People love to be cheated, but not by a simpleton. They are willing to be deceived, but it must be by one who has the appearance of an honest and talented man.

People refer us, said the doctor, to the wealth that quackery has amassed in this city, and the fortunes that patent pill-peddling has made here. And many think they need only turn quacks to become rich. But we hear only of the successful efforts of quackery; we see only the successful ones, the great crowd fail utterly and are unnoticed. Vastly the majority never emerge from the obscurity with which a kind Providence is pleased to invest their wicked and false pretences. Hundreds start new infallible pills and panaceal syrups, but those who make money on them are scant tens. We see and hear of the inordinate sale of the successful *one*, and judge without

a warrant that such is the history of all. But inquire of the apothecaries at the end of the year, for nine out of ten of the medical miracles for incurable diseases started during it, and they do not recognize them except as the almost forgotten name of humbugs that were widely advertised for a month, and then heard of no more. How many thoroughly recognized quacks ride in your city through a dozen successive years? How many more of them perish—starve out, before they attain to their ill-famed notoriety? For every full-grown, swelling, wealthy quack, who has flourished and fattened on the follies of his fellows, said the lecturer, I think it would not be difficult to show you a dozen broken-down and unsuccessful ones. Or, if you show me many, are they not rather men who had a substantial education, men of talent, ability, and energy, but who, lacking honesty, availed themselves unscrupulously of the confidence which the public reposes in their skill to delude them, and reap for themselves an ill gotten harvest? This at least must be granted, that one needs some other capital than impudence and dishonesty successfully to fleece the public.

He believed, too, that much of the reputation of great and eccentric men which was charged to their eccentricity, was really due to their great worth, though their peculiarities may have lent wings to their fame. It was not Abernethy's bluntness that made him the leader of a school, but his far-reaching discernment, which, classifying his personal observations, developed a sympathy and connection between distant organs that modified, and does to this day, the practice of the world. It was because Mounsey, "the Chelsea doctor," and the friend of Garrick, was possessed of an extraordinary share of common sense, and was a thorough and practical physician, that he so long ruled the ascendant in his sphere; not because he was possessed of a vitiated taste, neglected his dress, and had the bearing of a boor, and possessed a most mischievous wit, the latter of which he carried into his will, bequeathing his body to the dissectors, his velvet coat to one friend, and the worthless buttons on it to another. It was the skill of Demoulin which made him celebrated, not his well-known miserly habits, of whose fame there was so great a report that one who had been the closest of misers came and offered to sit at his feet and learn economy. Demoulin extinguished the dim candle, remarking, "we need no light to talk of economy by." "Enough," cried the miser, "I have learned my lesson," and departed. It was not Radcliffe's unpardonable rudeness that placed

him at the head of his profession, but his acute penetration, his well-digested experience, and his great attainments. Very possibly, that bluntness, well illustrated in the case of that gluttonous dyspeptic whom he advised "to hang himself, since nothing but death could free him from his complaints," might have helped to spread his reputation, and given wings to his really well-merited fame.

It was not the fact that Sir John Elliot painted a death's head on his carriage-door that brought him to the baronetcy, but his abilities, by no means despicable, assisted by his manner, which is said to have been so fascinating that his lady patients were forever falling in love with him. It was not because Sir Richard Jebb was always testy when his patients talked of dieting, and swore vigorously if they insisted on knowing what to eat, telling the honest inquirer that he could eat anything but the poker, which was hard of digestion, and the bellows for an equally good reason; but it was his keenness of perception, his profound learning, and his intelligent earnestness for his patients' recovery, which led the sick king to declare that he would have Jebb and nobody but Jebb, in spite of the etiquette of physicians ordinary and extraordinary.

These eccentricities were spots on the fame of the great. In the greatest we see nothing of them. There was no odor of quackery about the fathers of medical science—none about Linacre, "the purest Latinist of his day;" or Harvey, who, by hard labor, dragged to light that great secret of nature, the circulation of the blood; or the erudite Friend; or the eminent Stahl, whose doctrine of phlogiston, though now exploded, did good service in its day; or practical Sydenham; or religious and quaint Sir Thomas Brown; or Boerhaave, the "Voltaire of Science." There was nothing pretentious or adventitious in the great fame of the witty and benevolent Arbuthnot, of Gregory, or the great Cullen. There was no truthlessness in Denman, Heberden, Hartley, or Jenner, whose discovery drove far into the back-ground that loathsome disease which at one time was slaying half the people that died on the face of the globe, and would have exterminated it utterly if his successors were possessed of half the earnestness in enforcing vaccination that nerved him to its successful introduction. There was no humbug about our Rush or Colden, Bard or Warren. These were sternly honest men, most of them obliged to cope with poverty and science at the same time.

There was nothing counterfeit in our Physick, our Post, our God-man, our Hosack. There is nothing like mockery, nothing pretentious in the fame of our Mott or our Francis—names which their contemporaries, envious of posterity, hasten to honor—unwilling to wait the willing years—may they be many yet!—which will promote them to the seats of the Fathers, in which Time makes no further mark, and will nothing detract from their awarded greatness.

Wm. Hunter said that “success in the medical profession always attended the diligent.” and unless there is some grand inequality in the constitution it is true beyond a doubt. He who lets the little tricks go over to quacks, who sticks to his legitimate business, avoids the seductions of the belle-lettres proper, despises the doubtful fees of political places with the promises of politicians, and runs from indolence as from a devil, will certainly succeed. But, said he, suppose quackery were always profitable—there was something besides money worth having, a character which money could not buy. Few professions, said the speaker, offer more liberal rewards to the devoted than medicine. It yields a competence as speedily as most, and in itself has rewards of the highest intellectual kind. It is only the outskirts of the field that had been cultivated; within there is a vast area rich with the unturned mould of centuries. There are mines inexhaustible, into which no shaft has yet been sunk—whole fields, in walking over which the hazel-twigg would perpetually point downwards—close thickets and dense forests, into which the peering eye of man has not yet penetrated, all underlaid with strata of metals; but whether of dark coal alone, or of glittering diamonds, of iron, or of most precious gold, no one has yet announced.

He meets on each new day some new question to be answered—some new problem to be solved. He walks perpetually among a swarm of interrogatories. Every patient’s tongue crooks itself into the form of an interrogation point, to which his morning salutation must be a reply. In his troubled dreams points of interrogation bend over his pillow. There is not a phenomenon in nature—there is not a phenomenon in life, but in his eye stoops into its form and humbly begs to be straightened. Every operation of prehension, digestion, assimilation, secretion, and excretion, assumes the uniform shape. State any fact in medical philosophy, and as its supplement up starts the interrogation point, asking how to account for it. The facts in philosophy are soon stated and easily learned; but the questions presenting themselves to the intelligent reader are manifold and perpetually recurring.

ART. IV.—MALIGNANT DISEASES.

Professor Gross, of Louisville, Kentucky, was appointed chairman of a committee on the results of Surgical Operations in Malignant diseases. This report looks like Gross. It is long, learned, judicious and candid. He thus himself sums up his conclusions :—Ed.

“ From the facts and statements which have now been presented, embracing the opinions of many of the most intelligent, experienced, and distinguished practitioners in different ages and in different parts of the world, the following conclusions may be legitimately deduced :

First. That cancerous affections, particularly those of the mammary gland, have always, with a few rare exceptions, been regarded by practitioners as incurable by the knife and escharotics. This opinion, commencing with Hippocrates, the father of medicine, has prevailed from the earliest records of the profession to the present moment. Nature never cures a disease of this kind ; nor can this be effected by any medicine or internal remedies known to the profession.

Second. That excision, however early and thoroughly executed, is nearly always, in genuine cancer, followed by a relapse at a period varying from a few weeks to several months from the time of the operation.

Third. That nearly all practitioners, from the time of Hippocrates to the present day, have been and are still averse to any operation for the removal of cancerous tumors after the establishment of ulceration, rapid growth, firm adhesions, organic change in the skin, lymphatic invasion, the cancerous dyscrasy, or serious constitutional derangement ; on the ground that, if had recourse to under these circumstances, the malady almost inevitably recurs in a very short time, and frequently destroys the patient more rapidly than when it is permitted to pursue its own course.

Fourth. That in all cases of *acute carcinoma*, or, in other words ; in all cases of this disease attended with very rapid development and great bulk of the tumor, extirpation is improper and unjustifiable, inasmuch as it will only tend to expedite the fatal result, which, under such circumstances, always takes place in a very short time.

Fifth. That all operations performed for the removal of encephaloid cancer and its different varieties, are more certainly followed

by rapid relapse than operations performed upon scirrhus or hard cancer.

Sixth. That in nearly all operations for cancerous diseases hitherto reported, the history has been imperfectly presented, being deficient in the details which are necessary to a complete and thorough understanding of the subject in each case. This remark is particularly true in reference to the diagnosis of the malady, the minute examination of the morbid structure, and the history of the case after the operation, as to the period of relapse, the time and nature of the patient's death, and the result of the *post mortem* examination.

Seventh. That cancerous affections of the lip and skin, now usually described under the name of cancrroid diseases, are less liable to relapse after extirpation than genuine cancerous maladies, or those which are characterized by the existence of the true cancer-cell and cancer-juice.

Eighth. That although practitioners have always been aware, from the earliest professional records, of the great liability of cancer to relapse after extirpation, a great majority of them have always been, and still are, in favor of operation in the early stage of the disease, especially in schirrus, before the tumor has made much progress, or before there is any disease of the lymphatic ganglions, or evidence of the cancerous cachexy.

Ninth. That many cases of tumors, especially tumors of the breast and testicle, supposed to be cancerous, are in reality not cancerous, but of a benign character, and consequently, readily curable by ablation, whether effected by the knife or by escharotics. It is to this circumstance that we must ascribe the astonishing success which is said to have attended the practice of Hill, of Scotland, Nooth, of England, and Flajani, of Italy.

Tenth. That all operators insist upon the most thorough excision possible; removing not merely the diseased mass, but also a portion of the surrounding and apparently healthy tissues, as well as all enlarged and indurated ganglions.

Eleventh. That the practice has always prevailed, and still obtains, to save, if possible, a sufficient amount of healthy integument to cover the wound, and to unite if possible the wound by the first intention, on the ground that these precautions will tend much to retard, if not to prevent, a recurrence of the disease.

Twelfth. That much stress is laid by writers upon a properly regulated diet, and attention to the bowels and secretions after operation, as means of retarding and preventing relapse.

Thirteenth. That there is no remedy, medicine or method of treatment which has the power, so far as we are enabled to judge of its virtues, of preventing the reproduction of the morbid action after operation, no matter how early or how thoroughly it may be performed.

Fourteenth. That life has occasionally been prolonged, and even saved, by operation after relapse, as in some of the remarkable cases mentioned in a previous part of this report; but that, as a general rule, such a procedure is as incompetent to effect a permanent cure as a first extirpation.

The following points may be considered as of an unsettled character; at all events, opinion respecting them is much divided, and farther observation is necessary before they can be positively determined, either affirmatively or negatively.

First. Excision is of doubtful propriety in all cases in which the disease is of hereditary origin, or where it occurs in several members of the same family.

Second. It is doubtful whether an operation should be performed when the patient is very young and the disease is of rapid growth. There is reason to believe that surgical interference, in such a case, will only expedite the fatal issue, which is generally inevitable.

Third. It is problematical whether an operation should be performed when the disease is attended by suppression of the menses, or by great irregularity of this discharge.

Fourth. Not a few surgeons regard a resort to the knife as of questionable efficacy when there is a quickened state of the pulse, occasioned by the local irritation.

Fifth. There appears to be no general agreement among surgeons as to whether extirpation is proper when there are two or more coexistent and accessible cancerous tumors.

Sixth. It is supposed, but the fact is not established, that excision of carcinomatous tumors only tends to hasten the patient's death.

Seventh. It is doubtful whether, as has been asserted by different surgeons, the prospect of a permanent cure is greater, all other things being equal, after an operation on an old cancer, than after an operation on a cancer of recent standing.

Eighth. It has been stated by writers of great respectability, among others by Dr. Macfarlane, of Glasgow, that in robust women of sanguinary temperament, the re-appearance of cancerous disease, and its subsequent progress, are more rapid after operation than in nervous or lymphatic persons ; an assumption demanding verification.

Ninth. It requires to be proved whether excision ought to be performed in the ulcerated stage of malignant disease, as a means of prolonging life and of procuring comparative relief from suffering.

In bringing my labors to a close, I feel conscious that I have added nothing whatever to our previous information of malignant diseases. Nor in truth, could this have been reasonably expected. My sole aim has been to sum up our knowledge upon the subject ; to construct, as it were, a mirror which should reflect the practice and opinions of our predecessors and cotemporaries, and thus serve as a guide to future travellers in the same path. In a word, my object has been to show, not only what has been done, but what remains to be done. The facts which I have collected, if useful at all, are so rather in a negative than in a positive point of view. Our knowledge of the results of surgical operations in malignant affections is in a state of transition, which has much to hope from the future, but can gain little, if anything, from the past. What the microscope and animal chemistry, guided by the hand of modern science, may do for the subject, it would perhaps be premature to predict ; already they have rendered the cause essential service, and it would certainly be unphilosophical to suppose that they are incapable of affording further light.

Finally, in drawing up this report, I have rarely appealed to my own experience, believing that, even if it were fully exposed, it could add nothing of real value to the general stock of our knowledge upon a subject respecting which so much has been written by others. In point of number, indeed, my own cases could not be put in competition with the extensive scale of facts brought forward by some of the surgeons, the results of whose labors it has been my duty to bring before the Association. I have little, indeed I might say, no confidence in any operation for malignant diseases, except the canceroid varieties ; and I have for years past, as Professor of Surgery in the University of Louisville, deemed it my duty to discourage a resort to the knife in all cases of the kind, especially in

scirrhus and encephaloid of the mammary glands, ample experience having satisfied me of the utter futility of such an expedient, however early and efficiently employed. In cutaneous cancer, on the other hand, my rule has always been to operate, provided the disorder has not advanced so far as to preclude the possibility of removing the whole of the morbid growth ; and provided, also, that there is no evidence of constitutional infection. To this rule I shall rigidly adhere, unless my own experience, or the experience of others, shall show me the impropriety of it, when I shall most cheerfully abandon it.

S. D. GROSS, *Ch'n.*

LOUISVILLE, April 20, 1853.

[*New Orleans Med. Joarnal.*

Report of a Committee of the New York Academy of Medicine on the Medical and Surgical Aspects of the Crystal Palace : Presented February 1st, 1854. (Published by permission of the Academy.)

The Committee appointed by the Academy of Medicine to visit the Crystal Palace of this city, and to report upon any thing therein contained of peculiar interest to the medical profession, having assiduously and thoroughly attended to the duty confided to them, now respectfully beg leave to report:—

That at a meeting called at the house of Dr. Gardner, Nov. 25th, on motion of Dr. Van Kleek, seconded by Dr. Batchelder, Dr. Gardner was chosen Chairman, and Dr. Garrish, Secretary, and that, subsequently, the Committee have held frequent meetings.

That, in their investigations, they were met by the prompt-cooperation of the management of the Crystal Palace, through J. M. Batchelder, Esq., who not only furnished the members of the Committee, but also the President and Secretary of the Academy, with season tickets of admission, and, what was of more direct advantage, gave them permission to open cases, and to carefully examine their contents. In this respect, it is proper to state that they were willingly seconded by the owners or agents of the separate articles exhibited. Most particularly the committee are indebted to the attention of M. Luer, as well for his explanation of his own unsurpassed collection, as for his zeal in exhibiting the instruments of other German and French manufacturers, rivals at home and competitors here for the palm of superiority.

Your committee, in the following report, will mention such articles only as appeared to them peculiarly deserving of notice as new inventions, as new modifications of old instruments, as specimens of excellent workmanship, as of unusual adaptation to the purpose intended, as examples of obsolete instruments, or which, for any reason, seem worthy of consideration.

The Committee first visited the case of Mons. Luer, of Paris ; and the following articles are described as shown by the proprietor, fabricator, and frequent inventor of its numerous instruments.

Nov. 29th. Instruments used for the various *operations upon the eye*, invented by Luer. One for seizing the capsule of the lens, penetrating the cornea as a simple cataract needle, and then, by pressing upon a spring in the handle, the point of the needle was converted into a hook, enabling the capsular ligament to be easily seized ; then, relaxing the spring, the needle shape was restored, but still maintaining its hold upon the capsule, they were easily withdrawn together. One invented by Lagiere, of Paris, for removing the whole of a soft cataract, called a *suction needle*. It is in the form and of the size of a gold pencil-case, hollow, containing a piston in its cavity moved by a spring. Upon one extremity is a perforated needle, resembling an ordinary cataract needle, which, when passed through the cornea, and entered into the anterior chamber of the eye, by a graduated pressure upon the spring, will cause the fluid to recede from the eye, and enter into the barrel of the instrument, thus completely removing a soft cataract.

These two instruments were considered by the Committee to be the most ingenious and, probably, practical instruments of recent invention in this department. M. Luer exhibited numerous others of most beautiful workmanship and utility ; but as most of them have been made known some years to the profession, we only allude to them in order to express the high estimation which the Committee have for the ingenuity of the inventor, M. Luer, himself, and their appreciation of the great perfection to which the manufacture of these delicate instruments has been brought under his personal superintendence.

As tests of the "temper" of the instruments, Mons. Luer, taking a cataract needle, cutting kid smoothly, piercing it without fracture, then cut out pieces from the bone handles of instruments, bending it freely also, sticking the point into the bone so firmly, as to sustain its weight ; then, on using it as at first, the edge and point were seen

to be uninjured. Cataract knives, after whittling brass and bone, were uninjured.

The Committee then examined an instrument, invented by M. Luer, to be used in passing liquids through the nose into the stomach. It is a jointed stylet, intended to be passed into a flexible stomach tube, and then, by a pressure upon the handle, the end is curved at pleasure, and made to pass without difficulty down the œsophagus. The stylet is then to be removed, leaving the tube.

An urethral dilator, consisting of two pieces, enlarging by means of a screw in the handle.

A new needle, for tying deep-seated arteries.

A very ingenious instrument, if of practical use, for seizing and removing sticks, ends of bougie, and like substances, from the bladder. The article being first seized by the forceps extremity, by the process of withdrawal is directed into a line with the instrument, and, if not large, concealed within the instrument, and thus withdrawn.

A collection of small silver forceps (*serre-fine*,) about $\frac{1}{2}$ inch in length, with sharp points, intended to retain cut edges in coaptation, and thus to dispense with stitches, to be used in operations for hair lip, wounds, &c. (Mr. Marjolin lately presented a case of entropion to the Surgical Society of Paris. The patient had been affected with inversion of the lower right lid. After getting rid of the inflammation, M. Marjolin simply pinched up a transverse fold of the integument of the lid. and secured it with a *serre-fine*. The instrument fell off in a fortnight, leaving no trace of the entropion. Vide article in No. 28, Braithwaite, from the Association Journal, descriptive of the operation, its success, &c.)

Polypus forceps, having a groove in the extremity, and ratchet spring in the handle, for compression.

Small clamps, for preventing hæmorrhage during operations upon the lips, tongue, or similar places. The portion intended to be operated upon, is to be encircled within a ring, which, making pressure all around, leaves the centre free from blood.

Speculum oris, capable of dilation. This instrument is to be passed into the mouth, where it is easily fixed, compressing the tongue, showing the whole fauces, and allowing an œsophagus tube to be used, or any local applications made.

A tube used in laryngotomy, particularly applicable in operations for epilepsy. This instrument, by means of valves, enables one to speak without difficulty. Very ingenious and useful.

A set of spring forceps, invented by Desgranges, Senior Surgeon of the Hotel Dieu, of Lyons, for curing prolapsus uteri, intended to diminish the caliber of the vagina; and the method of operating is to seize the mucous coat of the vagina in various places, and forming it into folds; then leaving it thus restrained by the forceps, till inflammation and cicatrization contracted the vagina permanently.

An hæmorrhoidal compressor, by Amussat—grooved forceps; into these grooves, nit. argent, is to be placed, and then allowed to remain applied to the hæmorrhoids for twenty-four hours. This instrument has recently been improved upon by Jobert; *vide* cases reported and translated from the Gazette Medicale into the Charleston Med. Journal, for January, 1854.

Mechanical leech, by Horteloup. The cut is made by merely pulling a string, making a circular cut to any required depth, and with little pain or shock; and a suction was produced by a glass tube and india-rubber valves, moved by a screw, and perfectly controllable.

A breast-pump, with graduated pressure; a glass tube on which was a piston moved by a screw.

An obstetric forceps, by Van Hivel, of Brussels. In the inside of each blade was a groove, through which ran strips of iron, to be forced upwards by a screw. At the end of each of these strips of iron was an orifice through which ran a chain saw, to be moved below.

This was intended to saw through the head longitudinally, and thus to diminish its size. The instrument is exceedingly complicated, and much time would be necessary for its application, if practicable. It is, however, very ingenious and curious.

Obstetric perforator, by Van Hivel, consisting of one blade, through the end of which a sharp knife might at pleasure be protruded, by means of a screw in the handle.

Instruments for staphyloraphy, intended to sew the cut edges together, invented by Sotelaux, of Strasburg. One was a long probe, upon the end of which was a needle; this, when armed, is to be passed through the palate, and to be received into a ring spatula covered with buck-skin, placed behind the palate. The needle is then retained, and easily seized. This spatula also steadies the palate, rendering it much more easily pierced.

Instrument for compression in cases of aneurism, invented by M. Luer. This is a species of tourniquet, consisting of a pad-shaped

wood, with a notched, brass top, to which is attached a strap passing around the leg. It is stated that with this instrument the vessels of the leg are not compressed, and the circulation affected only where the pad presses.

A small spring for raising the edge of the inverted toe-nail, either upon one or both sides, is ingenious, and perhaps practically useful. Invented by M. Luer.

A very small enema case. The instrument is of india-rubber principally, consisting of a bag, pipe, &c. It is ingenious and useful.

A staphyloraphy needle was exceedingly ingenious, and of value if practically useful. It had a curved extremity, which was passed behind the part to be united, by a slide in the handle; an armed needle was passed through the edge, and the thread caught upon the portion behind. By a similar process, the needle was passed through the other side, and thread could then be easily tied.

A double gouge forceps, by Luer, for cutting bone without breaking—making a clean cut—a valuable instrument.

A modification of Lallemand's lithotrypsic instruments, modified and improved by Luer, increasing their power and convenience.

A great variety of instruments for scarifying the prostate gland by means of concealed blades.

Galvanic catheters—the catheter of copper with zinc stylets, for spasmodic stricture.

A double knife for making microscopic sections of any desired thickness—an exceedingly useful instrument.

A bistoury for hernia—consisting of a concealed blade presenting no cutting edge, even upon firm pressure—thus enabling it to be introduced as desired, without danger—and so constructed, that by turning a screw in the handle, the blade is then exposed.

A pair of scissors, composed of two long, straight bistouries, capable of being separated into single instruments; united as ordinary scissors, or with the cutting edges, external so that they may be introduced into a cut made for any purpose, as in lithotomy for example, and then opened and withdrawn, making thus an extensive cut.

Ring compressor, for arresting hæmorrhage, when operating upon the lips or eye-lids. The part to be operated upon is to be included within the ring, which is screwed down upon a plate below, thus obstructing the circulation in the part.

A modification of Simpson's uterine supporter, by Luer, consisting of the addition of an india-rubber cushion, for the os uteri to rest upon, and ivory stem, in one case ; and in another, of the same rubber cushion, as a rest, and a brass stem to enter the os. This is thus made from an idea that, by the corrosion of the metal, the ulcerations within the cavity would be stimulated and cauterized, and a cure effected.

A modification of Simpson's sound, by the addition of a sliding button marking the depth to which it had been introduced into the uterus,—also, as adding to its convenience, the handle being constructed, so that the sound might be passed into it, and the instrument shortened.

A pair of obstetric forceps, invented by M. Luer, permitted either blade to be applied first, locking in this manner with equal facility—the two blades being brought into the same axis by means of a slight rotation effected in the handle of one blade, and without detracting from its strength. The advantage of this instrument was such, that in case of an unequal application of the two blades upon the head of the child, and thus preventing their locking, instead of removing one or both blades, as with ordinary forceps, the handle of the upper blade could be passed underneath, and could there, perhaps, be easily locked.

The committee next visited the case of instruments fabricated by Wunsche, of Leipsic. The contents of this case were much injured by rust, probably caused by accident in the transportation. They were generally of rude manufacture, contrasting markedly with the beautifully finished specimens from France and Denmark. With few exceptions, the instruments were of a date at least a half century anterior to the present time. The instruments, generally, were noticeable for their antique appearance. One or two claimed attention for their originality. The first was denominated an obstetric trephine. This was an ordinary trephine, with a handle about a foot long, all contained in a simple brass tube. The intention of this instrument was, that it should be passed into the vagina and firmly pressed upon the presenting skull—the tube guarding the mother from injury ; and then the trephine could be used in the customary manner. An opening being thus made in the skull, a head tractor came into play. This instrument consisted of a brass tube, similar to the one above described, capable of being passed into the opening thus made ; and, by means of a screw in the handle, three

strong claws were protruded within the cranium, forming right angles to the handle of the tractor, and being thus within the skull, enabled strong traction to be made upon the head. At a subsequent period this instrument might be used, in some degree, as a pair of craniotomy forceps, and portions of bone might be seized by it. These instruments were invented by Kiwisch, and are more noticeable for their ingenuity than apparent utility.

An osteotome invented by Heiner, of Wirtzburg, Bavaria, consisting of an endless chain saw, worked by a crank handle, by far the most ingenious instrument, and of the best workmanship, in this collection.

A collection of papier maché models, made by the Association of Industry, in Nuremburg, Bavaria, were very fine imitations of nature.

To the very large case of Charriere, of Paris, the committee had complete and thorough access; but, owing to the absence of any capable person interested to exhibit the various instruments, your committee may have inadvertently overlooked some specimens of novelty and merit.

A large collection of the various forms of speculi, among which nothing new was observable. Some of these were electrotyped with gold. The advantage of this is their freedom from rust and stain; their marked disadvantage, that of diminution of light, and the altered color given to the parts by the reflection from the yellow metal.

An obstetric forceps, by Bernard, of Paris. This instrument was exceedingly ingenious. In shape of an ordinary character, the blades might be fastened together in almost any situation, when the handles were brought sufficiently near together, by means of a link with a ball-and-socket joint, dependent upon the lower portion of the neck of the blade; when the blades were brought together in the usual position, another hinge fastening above retained them in that position, but allowing a slight movement which gave a latitude of perhaps an inch at the end of the blades.

A beautiful instrument was an inhaler, for vapors and steam from herbs, &c.; an oil silk fitting accurately over the face, attached to a spirit-lamp and cup.

A pair of obstetric forceps, with a hinge in the handle, permitting it to be folded up, and thus rendered more portable; in other respects, this instrument was the ordinary French forceps.

An india-rubber hæmorrhoidal cushion, consisting of a pad to be placed upon the anus, from which proceeded a stem of the same material, about an inch in length, intended to be passed into the rectum, and supporting the hæmorrhoids, the whole to be kept in place by a strap encircling the body. This instrument is also serviceable in cases of prolapsus ani.

During the last of December, a case of instruments was entered at the Crystal Palace, from the manufactory of C. Nyrop, formerly an apprentice of M. Luer, of Copenhagen, Denmark. These instruments were of fine workmanship, comparing favorably in that respect with the best on exhibition. A general recommendation was their moderate price. Among those peculiarly worthy of notice were the following :

A rotation saw invented by Nyrop. The peculiarity of this instrument was its facility of being moved in various directions by means of a ball-and-socket joint, somewhat restrained in its action ; its capability of being used by the hand, or by means of a brace, like the ordinary French trephine ; and still more in the saw itself, which consists of a double circular saw (with perpendicular teeth) turning in opposite directions, and not only cutting more rapidly than with a single saw, but steadying it in its application. This appears to be superior to any similar instrument in the Exhibition.

A pair of obstetric forceps, invented by Prof. Levry, of Copenhagen, were noticeable for the ingenious manner in which a hinge was inserted in the neck of each blade (and its fastening, also,) for convenience in carrying.

A compressorium nasi, invented by Larsen, consisted of tubes passing into each nostril, and plates pressing upon the outside of the nose, both arising from a band which passed over the upper lip and regulated by screws, intended to retain the nasal bones in their proper situation, when dislocated or fractured.

A vaccination case, invented by Drejer, neat and compact, contained knives adapted to this purpose ; cases, &c., for keeping scales or lymph from the air.

Several orthopædic apparatus, invented by Boch, and constructed by Nyrop, were particularly deserving of notice, not only for their beauty of finish, but for their apparent utility in torto collis, deformities of the back, &c. If their real value is at all in proportion to their mechanical ingenuity, they are eminently worthy the attention of those engaged in this department of surgery.

A truss for umbilical hernia, is noteworthy.

A clyster pump, is of simple construction and reduced price.

A pair of ear forceps, invented by Prof. Larsen, are delicate and probably serviceable.

A knot-binder, invented by Larsen, for tying ligatures upon deep-seated arteries, appears of utility.

A double cataract knife, one blade sliding upon another, was noted as perhaps of practical use.

An exploring needle. This instrument consisted of a grooved needle, which, after being plunged into a tumor, was covered with a sliding blade, which prevented the matter within the groove from being wiped away, or mixed with other fluids while withdrawing it.

In a case of india-rubber articles exhibited by Vernant Cabante, of France, with no name or maker given, the following instruments were found. Several uterine supporters, which were constructed in the shape of a bag, with a tube of the same material attached. They are to be introduced into the vagina, then inflated by means of a similar bag to be applied to the tube, which is then closed by a stop-cock, and left *in situ*. A double cap for the head, with two openings for hose, through which continuous currents of hot or cold water might be passed.

Stockings for swelled legs, varicose veins, &c.; the india-rubber made to run spirally.

Fracture apparatus for producing extension and counter-extension.

Pad and straps to pass round the body, for umbilical hernia of children.

Your committee carefully examined all the medicines, chemicals, &c., and have thought the following worthy of the attention of the Academy :

Specimens of ergotine, by Bonjean, of Chamberry, Sardinia.

The resinous extract of ergot, by Parodi, physician of Piedmont.

Citric acid and nut oils of various sorts, by the same exhibitor.

Blanchard's pill of the ioduret of iron, not liable to decomposition.

Essences of cogniac and rum ; oil of valerian ; oil of calamus ; oil of chamomile (*anthemis nobilis*,) by Spolen and Schimmel, of Germany.

Alluminate of iron, by Herman of Germany.

Extract of asparagus, caffeine, and theine, by Merch, of Germany.

Essence of cucumber, powdered extract of cucumber, powdered belladonna, aconite, conium, hyoscyamus, digitalis, lactuca virosa, of great beauty, by Gehe & Co., of Dresden.

Most beautiful specimens of chemicals, by Powers and Weightman, of Philadelphia, the finest in the exhibition. Arseniate of quinine, a new and valuable addition to the Pharmacopœia; bisulphate of quinine, iodate of quinine, caffeine, theine.

A set of tin splints for fractures, by Dr. Kerr, of Canada, which was noticeable for its ingenuity and its unusual shapes.

Daguerreotype representations of the vaccine sore, at different periods and at various removes from the cow.

<i>Committee,</i>	{	AUGUSTUS K. GARDNER, <i>Chairman.</i>
		JOHN P. GARRISH, <i>Secretary.</i>
		J. P. BATCHELDER,
		ISAAC GREENE,
		RICHD. S. KISSAM,
	{	JNO. R. VAN KLEEK.

[*New York Med. Jour.*

ART. V.—*Dr. Murphy's Letter.*

[The following is a portion of a letter from Jno. A. Murphy, M.D., now in Paris, as we find it in the *Western Lancet*. It will be read with interest, for it contains some very valuable notices of subjects that are just now full of interest to every one. The author and Dr. J. P. Judkins, expect to return home in September to take their places in Miami Medical College, Cincinnati.—Ed.]

In my last I promised to give you an account of the epidemic of Cholera—its treatment and mortality. I find, however, that I must give you only an abstract of what I have observed, lest it might be tiresome to you and your readers. It may be that at some future time, when I have fewer topics of interest, I will write out in full my observations for you. Let me, then, give you the brief abstract on cholera before I proceed to many other matters which I wish to put in this letter. From the appearance of the disease here until the 1st February, 989 cases were treated in the hospitals, of which 526 were discharged cured, and 459 died. The epidemic was not a serious one, judging at least from those which ravaged Cincinnati in '49, '50, and '51. The majority of the cases I saw, were not very severe ones, and if they had been treated differently, I think the mortality would have been much less. You know, I think, the most

successful treatment, admitted as such by the large body of the profession with us, was the administration of small and frequent doses of calomel and camphor.

Here, in all the hospitals, calomel was not given by any of the distinguished men. Indeed, they have no confidence in it, and very sneeringly call it, the *treatment of the North*. All confidence was placed in the administration of warm alcoholic drinks. At La Charite, in the services of M. Rayer and Briquet, who treated all the cases sent to this hospital, warm alcoholic drinks constituted the principal part of the medication. It is true, mustard plasters were freely used to all parts of the surface. M. Briquet also gave large doses, and frequently repeated, of Tinc. Opii, by the mouth and rectum. The patients were covered warm in bed, and bottles of hot water were placed around them. If vomiting was severe or urgent, seltz water was given, which is nothing more than ordinary water charged with carbonic acid.

Vapor baths were administered to the patients in bed, by an apparatus for this purpose. At the lying-in wards of the Clinique de la Faculte the cholera was very severe, and carried off a great number of women. In the most of the cases I did not observe that painful and troublesome symptom—cramp. At this hospital two cases in the wards of M. Prof. Nelaton were treated with calomel; one recovered and the other died. The history of these two cases is of some interest. My friends Prof. J. J. Judkins and Dr. Williams were in the wards of M. Nelaton, one evening in December in conversation with the Interno, who told them that he had two cases of cholera,—one being seized a few hours before their visit, the other the day before. They advised the Interno to give calomel and camphor in small doses to both. The one which had been laboring under the disease for the shortest time improved from the administration of the calomel and recovered in a very short time. The second case improved and lived until the evening of the next day, but died of congestion of the brain. When M. Prof. Nelaton made his visit the next morning, he was much surprised to see one of the patients living, and expressed his astonishment to his class, saying that the treatment had been suggested by the foreign physicians (*par deux medecins etrangers*.) As for himself, (said he) I have no confidence in it, and can only regard its success in the two cases as accidental. As I have said before, M. Nelaton is not alone in these opinions. M. Bean of Hospital Cochin treated the cases in his ser-

vice alone by seltz water. He said that the indication was to husband the patients' forces, and therefore, he would not apply mustard plasters. This treatment you may regard as a piece of drollery in medical practice here. The treatment in all the hospitals was very similar. M. Arran, who was filling temporarily the place made vacant by the resignation of M. Lewis at Hotel-Dieu, experimented with Iodine, administered by the mouth and rectum. The results were not very good. At La Charite I may say that Prof. Piorry treated his patients by albumine alone. There are two parties here as elsewhere, on the question of contagion. The majority do not believe that it is at all contagious, while a few, very respectable withal, give credence to its contagiousness. Post mortem examinations have revealed nothing new as to its pathological anatomy. M. Veonois of Hospital Cochin, and Rayer of La Charite examined the urine of all the patients in their services, and invariably found albumen present. M. Mandi found cryptogamme in the evacuations.

Some very curious examples of the influence of cholera in the cure of other diseases were noticed in the hospitals. The service of Prof. Rostan at Hotel-Dieu, next to that of M. Rayer of La Charite secured the largest number of patients.

He delivered several clinical lectures on cholera. In one of them, he said that it sometimes cures pre-existing affections, sometimes aggravates them, and again exercises no influence whatever, the diseases continuing their ordinary march. He instanced many cases, two or three of which struck me as being very interesting. A young man entered his wards with a deep seated phlegmon in the left iliac region, the prognosis of which was pronounced to be very grave, owing to the cachectic state of the patient. Under the influence of a severe attack of cholera, the phlegmon passed away, and he made a rapid convalescence. A case still more interesting was that of a young girl who from great mental distress fell down suddenly paraplegic. She was treated very actively without any relief. A short time after her admission she was seized with an intense attack of cholera. As she convalesced from cholera, all her paraplegic symptoms passed away, and she was discharged from the hospital cured.

The duration of cholera has been the same as that of the epidemic of 1832, which I give you as a matter of interest and reference *en passant*, of 4,965 persons attacked, 294 died from one to six hours; 615 from six to twelve hours; 492 from twelve to eighteen hours;

1,173 from eighteen to twenty-four hours ; or 2,474 died in twenty-four hours.

Of the other 2,941, 823 died from 1st to the 2d day.

520	"	2d	"	3d	"
382	"	3d	"	4th	"
240	"	4th	"	5th	"
125	"	5th	"	6th	"
79	"	6th	"	7th	"
171	"	7th	"	8th	"
35	"	8th	"	9th	"
36	"	9th	"	10th	"
111	"	10th	"	11th	"
19	"	11th	"	12th	"

But I must proceed to some other matters. I have collected much of interest; to myself at least, but lest I may trespass on you with what I am sure is a hackneysd subject, I will reserve them to a more convenient time. Prof. Piorry of La Charite has been making a series of experiments with inhalations of Iodine in the treatment of Phthisis Pulmonalis. He read a paper on the subject a short time ago, before the Imperial Academy of Medicine. I can only spare room for the conclusions of his paper. The definite results of the treatment are as follows : " Marked amelioration in the anatomical characters and symptoms in twenty cases. Disappearance of the anatomical characters, and the most part of the symptoms in seven cases. Death with or without positive amelioration in four cases." He says, " You will observe, that the amelioration in the material state of the patients, corresponded almost constantly with an advantageous modification in the functional symptoms, such as the cough, the abundance of matters expectorated, and the hectic fever. It has happened even under the influence of the treatment that several women, whose menses had become suspended, and who had lost large quantities of blood from the lungs, have had the menses to reappear. The mode of inhalation is very simple ; it consists in placing a bottle containing from ʒi to ʒiiss iodine to the mouth, and applying heat. The patient makes a deep inspiration from time to time, during half an hour. In conjunction with this, he administers iodine internally, and applies it over the parts of the chest dull on percussion, as well as over cavities. He gives large doses of quinine when there is splenic enlargement, or hyperemia of this organ. When

there was hectic during the night, he gave small doses. If pus or mucus accumulated in the bronchia, he administers emetic doses of Tartrat. Antim. In addition to all this, the patient is allowed the best diet of the hospital. You know the reputation of Piorry, in the diagnosis of diseases of the thoracic cavity, by percussion and auscultation. He uses a plessimeter, and makes out a diagnoses, as he says, with absolute certainty. After the reading of his paper, it was the subject of some discussion. One member asked him if he had made post mortem examinations of those of his patients treated by inhalations, who died. He replied with great emphasis in the negative, and that he had as much confidence in his plessimeter, as he would have in a post mortem. He sits down by the bedside of each of his patients, at least of all those he examines daily, which is never more than those in one ward. He next calls for a large sheet of adhesive plaster, with which he covers the entire front part of the chest of the patient.

He then commences his percussion on the plessimeter. As he says, he *maps* out the condition of the lungs. These *maps* are really very curious specimens in their way. I have stood and watched him for an hour or two, and have been excited by laughter and ridicule.

On his *map* or adhesion plaster he has dullness absolute here, a cavity there, and commencing softening at some other part. Piorry has no doubt been very strong in his day; but I must say I cannot regard him so at present. He makes out a diagnosis of the diseases of the spinal marrow, as inflammation, the existence of a tumor, &c., by the same process, by percussing over the spine itself. I saw him examine a girl, and diagnose positively, disease of the left kidney. The girl died finally, when it was found that she had but one kidney, which was perfectly healthy!

He has taken up the idea lately, that he can produce adhesion of the walls of cavities of the lungs, to the chest by compression, and in this way cure his patient. To carry out this idea he had Chariere, the instrument maker, to fabricate an ins'trument composed of a strong spring, with two pads. One of the pads is placed over the cavity, and the other on the spine. The pressure exerted by this instrument is by no means inconsiderable. I have seen it applied, and worn for some time; but I do not think that any one has seen any good results from it, unless it is M. Piorry himself.

Another one of his ideas is, that we may see an enlarged spleen diminish in size, in a few minutes after the administration of a portion of quinine. He is not followed by a large class. Of all the men here, he has inspired me with the least respect for scientific ability. He delivers three clinical lectures weekly : Prof. Boillaud giving the other three on alternate days.

His practice is very small ; which is unusual for one occupying the distinguished place he does.

M. Becquerel, one of the physicians of hospital Lourcine, has recently published a paper on the treatment of vaginitis, by cauterization with Nitrat Argent. It is of so much interest, that I give you its prominent points. He divides the disease into three varieties, specific, chronic, and simple acute vaginitis. The acute variety, is accompanied sometimes with urethritis. The coincidence of urethritis, is less frequent than has been generally supposed. Becquerel has observed it only once in 40 cases. He makes no difference in the treatment of simple and specific vaginitis. The sooner the cauterization is applied after the disease has commenced, the more certain is the cure. The pain which follows the cauterization, is more severe during the acute stage, than the chronic one. The introduction of the speculum is absolutely necessary for the cauterization. An injection of cold water, is thrown into the vagina to wash out the mucopurulent fluid. The back part of the vagina is first cauterized, and then the neck of the uterus ; and as the speculum is withdrawn, the remaining portions of the vagina. An injection of cold water is thrown up five minutes afterwards, and is repeated several times during the day, if the patient complains of pain. In general the number of cauterizations vary from five to six.

The results obtained determine the number. The first effect produced is pain, which is seldom severe enough to make the patients cry out. It is proportioned to the acuteness of the disease. The second effect is an increase of the discharge, which is observed to be constant in every case. The quantity, but its color never does. The increase of the discharge varies in duration ; it generally lasts from two to four days. If it disappears completely at the end of four days, it is a certain sign of the cure of the disease. If, however, it persists, there is need of further cauterization. After the first application of the Nitrat Argent, he waits two full days, which, with the day of the operation, makes three ; when two cauterizations have been made, he awaits three days so as the better to appreciate the

cure. He says that he cured all of his cases in this way, numbering more than forty. In general three cauterizations are necessary for the cure of the acute cases, and six for that of the chronic ones. When catarrhal inflammation of the neck of the uterus exists, it is very important that the Nitrat Argent, should be applied to it. Relapse of the vaginitis as in acute cases where it had been neglected has been observed.

I have devoted some considerable part of my time to the Hospital des Infants Malades, (children's hospital.) M. Tuersant is the surgeon. You may remember that his father occupied the place of one of the physicians to this same hospital, and gained a great reputation for the treatment of infantile diseases. The present surgeon is a small man with a reddish face, grey eyes, a nervous manner, being very quick in all his examinations and manual operations. He looks as if he had seen 45 years. His clinical day is Thursday, when he delivers a lecture and generally operates on four or five patients. He is a true Frenchman, so far as talking is concerned, but does not say very much on the subject proper of his lecture.

In a recent lecture on Croup and Tracheotomy he gave the following statistics of this operation in this hospital.

In 1850, 20 cases were operated on, of which 6 were cured.

In 1851, 31	"	"	"	"	12	"
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In 1852, 49	"	"	"	"	11	"
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In 1853, 61	"	"	"	"	7	"
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These statistics are not certainly very encouraging. As for myself, I believe that if the operation was performed sooner than it generally is, that the success would be greater. M. Tuersant has been very successful in the treatment of erectile tumors by the application of the actual cautery. He has made these tumors the subject of several lectures during the winter, a few brief notes of which I send you. He divides them into venous erectile tumors, and arterial erectile tumors according as one or the other of these tissues predominates. They may be sometimes pediculated, or again at others quite flat or round. They are almost always congenital. In certain families they are hereditary, and have persisted to appear in the fourth generation. Generally there is but one, but occasions are not rare which show us several on the same patient. They are observed more frequently below the diaphragm, sometimes on the

arms, and very frequently on the head. When there are several on the same individual, one is observed on the head.

The progress of these tumors is very variable. They may extend very rapidly either in depth or width. Generally they demand prompt surgical treatment; sometimes they cure spontaneously. This happy termination is not very frequent, and never observed in tumors very voluminous. When they are cured in this way, it is owing to the appearance from some cause or other, of an inflammation in and around them. The prognosis is grave; but it may vary according to the size and seat of the tumor, its superficial or deep seated position.

The treatment is quite various. The first plan is to use all means which destroy immediately the morbid tissues. The second comprises all those remedies, which modify or transform the pathological tissues. In the first class are included ligature, extirpation, cauterization, in mass with the ferrous or caustics. The second includes compression, ligature of the principal vessel of the part, vaccination, partial cauterization with needles at a white heat, and lastly the seton.

The ligature would be an efficacious remedy, if it was applicable to all cases, and if it did not give rise to grave accidents. If the tumor is decidedly pediculated, and its roots do not extend into the surrounding tissues, its success is almost certain. If, however, the base of the tumor is large, and diffused, and more or less profoundly situated, we may succeed in causing the tumor to slough off, but it will be reproduced by the roots which remain.

Extirpation of these tumors has deservedly fallen into discredit. Hemorrhage of the gravest character is often the result; and the rule given by J. L. Petit to carry the knife beyond the diseased tissue, does not render the operation any safer. If the surgeon decides to extirpate these tumors, they ought to be perfectly circumscribed. The operation of cauterizing in mass may be made in two ways. First, with the actual cautery; second, with caustics. The cauterization in mass with a *bouton de feu* should only be made on tumors of very small volume, which may be destroyed immediately.

The potential caustics, (in general the Vienna paste) has been recommended by Aug. Birard. I have recourse to them very often. These caustics are, however, only applicable to certain cases; where the tumor is very superficial, and where there is a point of support for the pressure.

The compression must be made on the tumor, and at the same time on the neighboring parts. In this way it arrests the course of the blood in the tumor, and in the surrounding parts which nourish the erectile tissue. The ligature of the principal vessel of the part has been followed with brilliant success, by M. Roux, and other surgeons. It is, however, dangerous, and is frequently followed by frightful hemorrhage.

The seton may be, and ought to be employed in certain conditions. In a case where ligature of the external carotid had been advised by a professor of the Faculty, we obtained a complete cure by the use of a certain number of threads passed through the tumor, in the lapse of five weeks to two months.

If it is less dangerous than the ligature, it is followed by erysipelas, which is so fatal to children. The cure by vaccination, especially when children have not been vaccinated, and the tumor is flat, is followed by satisfactory results. We make with a lancet, from three to six punctures, not upon the tumor itself, but on its limits. The virus, if possible, ought to be taken from a pustule and employed immediately. Partial cauterizations with needles at a white heat, are made by means of platina needles, inserted into a ball of iron.

We puncture the tumor according to its volume, a certain number of times. They are repeated if necessary, until a cure is accomplished.

An inflammation is determined in the thickness of the tumor, and in consequence an inodular tissue is formed which takes the place of the erectile tissue. We have recourse to this means the most frequently; its application is simple and easy. Its action is certain and sure. The erysipelas which follows so often all other therapeutic remedies are very rare as a consequence of this.

It is no matter what means we use, we must remember that there are erectile tumors which defy all surgical efforts; they are those multiple erectile tumors, which invade simultaneously all parts of the body, develop in all the tissues, and leave us nothing to do, but to watch their fatal progress."

I have seen many cases cured by M. Guersant. He is also a great partizan of the *fer rouge*, for the cure of prolapsus of the rectum in children. He punctures the margin of the anus, in several places, and generally cures the patient, with one application.

Since I last wrote you, the subject of the treatment of uterine deviations by Simpson's repressor, as modified by M. Valleix of La Pitie, has been brought before the Academy of Medicine. Nothing has been said since the protracted discussion of the whole subject in 1849. The discussion which will take place shortly, promises to be very exciting, if not somewhat severe. The occasion of the introduction of the subject at the Academy, was the reading of the report of the treatment and death of a woman at hospital Lourcine by M. Broca, one of the surgeons of that hospital. The case was one of anteversion of the uterus, for which the redressor was applied. I have not space in this to give you the case in full, but I must say that I do not believe the death of the woman was determined by the instrument. The woman had peritonitis of a chronic character, and for this reason I believe M. Broca is wrong in attributing the fatal termination to the redressor. He says, moreover, that not the least trace of a wound of the internal surface of the uterus could be found, nor of any inflammation of the peritoneal or external surface. However, the report was thought to be a matter of great importance, as it deservedly is, and was sent to a committee composed of Depant, Huguier, and Robert. At the next meeting, Prof. Cruveilhier read a long report of a case which terminated fatally under his observation. This report was sent to the same committee, whose action is anxiously looked for.

PART THIRD.

BIBLIOGRAPHICAL NOTICES AND REVIEWS.

The Science and Art of Surgery ; Being a Treatise on Surgical Inquiries, Diseases, and Operations. By JNO. ERICHSEN, Professor of Surgery in the University College, and Surgeon to University College Hospital. Edited by JNO. H. BRINTON, M. D. ; Illustrated by three hundred Engravings on wood. Philadelphia : Blanchard & Lea, 1854. (For sale by Riley & Co.

The above work is a treatise, strictly elementary ; and designed to facilitate our knowledge of the *Science and Art* of Surgery.

For a number of years the author has been Professor of Surgery in University College ; and Surgeon, also, to the College Hospital, having under his charge the wards once occupied by the celebrated Liston.

The volume before us bears the appearance of having emanated from an individual who has had fine opportunities for information, and has improved them. All of the usual topics are discussed, some of them elaborately, as, for example, *Inflammation* and *Operations* and *Amputation*. Properly enough the author has omitted a consideration of diseases of the Eye and Skin, as being special subjects that would require for their proper description more space than could be allotted them in an elementary work.

Most of the wood-cuts, with which the work is illustrated, have been made under the author's superintendence, and consequently have a truthfulness and accuracy about them not usually found in similar books of the day.

The following on the *Microscopic* characters of *Cancer*, may be taken as a specimen of the doctrines and style of the work :

“The microscopic characters of the different forms of cancer have of late years attracted considerable attention among pathologists. They consist, in all the varieties, essentially of the same elements, though these may differ somewhat in appearance, and in relative preponderance, in the different forms of the affection. In all there is a fibrous stroma or basis, firmer and closer in some, as in scirrhus, than in others. This yields by scraping or pressure, a turbid fluid, termed the *Cancer juice*, in which granules cells, pigmentary, and fatty matters, are found in varying proportion. The granules, which are minute, sometimes amorphous, at others presenting that vibratory condition termed the molecular movement, are met with in all varieties of cancer, though they occur in largest quantity in scirrhus. The cells, to which great importance has been attached by various observers, and which have often been looked upon as characteristic, or pathognomonic, of the disease, though perhaps erroneously so in the strict acceptance of the term, present, however, such peculiar characters, that it is almost impossible to mistake them. They are spherical, fusiform, or spindle-shaped, elliptic or caudate, having often two or three terminations, are usually compound and nucleated. These various appearances are presented by them in all forms of the disease ; it is, however, more especially in the encephaloid variety that they assume a large size, and present

their most marked fusiform and caudate shapes. The pigmentary cells are principally, if not altogether, found in Melanosis. Much diversity of opinion exists amongst surgeons as to the value that should be attached to these microscopic signs in determining the true nature of many tumors; some being guided by these appearances alone, others looking upon them as uncertain and fallacious, and trusting rather to the general characters of the growth. The latter, however, appears to me to be too limited a view of the subject; for, although the unaided eye of an experienced Surgeon, may, in many cases recognize the true character of a tumor, and the microscope, in some few instances, fail to reveal it; yet there can be no doubt that, in many cases, it is only by the aid of this instrument that the real nature of the growth can be determined."

"It is doubtless true that every one of these microscopic elements may separately occur in the normal tissues of the body, some in those of the adult, others, as the caudate and fusiform corpuscles, in the embryo, in whose skin these are largely met with; but, though this be the case, it does not appear that they are ever formed in any tumors, except those of a malignant nature; and in these, it is rather by the aggregation of these appearances, than by any single one in particular, that the true character of the disease is determined. In these examinations, however, the experienced surgeon will find that the appearances presented to the naked eye, will assist him much in pronouncing upon the malignant or cancerous character of the tumor. It is certainly a remarkable circumstance that the "recurring" or semi-malignant diseases, as well as those that are truly cancerous or positively malignant, present under the microscope structures that closely resemble those of tissues in process of development, either in the form of imperfect exudative matter and fibro-cellular tissue, as in the fibro-plastic tumors, or in the similarity presented by the corpuscles of encephaloid, to some of those of the integuments in the embryo."

Into a consideration of the propriety of removing malignant tumors—*hard and soft* cancers—the author but briefly enters; what, however, he says on this subject, seems to us entitled to great respect. Without condemning the practice altogether, he nevertheless evidently inclines, as does all other Surgeons, well posted up in the statistics of the subject, to the policy of letting cases of decided character alone. Those and only those, should be operated on, that are unconnected with that peculiar condition of the system, termed a cancer-

ous *cachexy*, or what is the same thing, hereditary taint. The observations of Paget, in regard to the *early* removal of tumors *supposed* to be malignant are valuable. He states that the average duration of life of those laboring under this form of disease, in whom the primary affection is removed, is about thirty-four months, while the average life of those in whom the disease is allowed to run its course, is scarcely one year. But we will not any longer keep the reader from the remarks of the author, on this and similar points.

“But in discussing the propriety of operating in a case of Cancer, the Surgeon can have little to do with general or abstract considerations. He has to determine what had best be done, in the particular case that he is actually considering; and it will serve him little in coming to a conclusion as to the line of practice that he should adopt, to refer to the statistics of the gross results of operations, or to general comparisons between the results of cases that are not operated upon and those that are. The whole question narrows itself to the point as to what should best be done in order to prolong the life, or relieve the suffering, of the individual whose case is being considered. In order to come to some definite conclusion on this, it is necessary to classify the different cases of cancer, and to arrange them under the heads of those in which no operation is justifiable; those in which the result of any such procedure would be very doubtful; and, lastly, those in which an operation is attended with a fair prospect of success.

“The operation ought never to be performed in those cases in which there are several cancerous tumors, existing in several parts of the body at the same time. Here the disease is evidently constitutional, and could not be eradicated by any series of operations. Then, again, if the cancerous cachexy is thoroughly developed, or if the disease be hereditary, it is useless to remove a local affection, as the malignant action will certainly manifest itself elsewhere, or perhaps, even speedily return in the cicatrix. So, also, if the tumor be of very rapid growth, and be still increasing, there would appear to be so vigorous a local tendency to cancerous deposit, that it will speedily develop itself again in the cicatrix. If the tumor be so situated that it cannot be completely and entirely extirpated by cutting widely into the surrounding parts, it ought not to be meddled with; otherwise the affection will to a certainty return in the cicatrix before it has closed. If the whole of the affected organ, as a bone, cannot be removed, or, if the skin and glands be involved,

is useless to attempt the extirpation of the growth, as a speedy relapse may be confidently looked for. In the very chronic and indurated cancers of old people, it is often well not to interfere, as in these cases the affection makes such slow progress that it does not appear in any way to shorten life, and the mere operation might be attended with serious risk at an advanced age.

“Those cases in which the result of an operation is of an extremely doubtful character, but in which no other means offer the slightest prospect of relief to the patient, have next to be considered. Cancers of the eye and of the testes belong to this category; for though more liable to return than similar affections of any part of the body, yet they may be considered fit cases for operation, inasmuch as in no other way has the patient the slightest chance of being relieved from the disease. In those cancers that are already ulcerated, the surgeon may sometimes operate in order to give the patient ease from present suffering, or perhaps, as in some cases recorded by Brodie, with the view of prolonging the duration of life; but he can have little expectation of effecting a permanent cure. Lastly, if the tumor be of so large a size, or be so situated that its removal cannot be undertaken without so serious an operation as to occasion in itself considerable risk, the propriety of operation is always very doubtful.

“Those cases of cancer in which an operation is, in my opinion, not only perfectly justifiable, but should be urged upon the patient as affording the best prospect of preserving his life, are, in the first place, those in which the disease has appeared to originate from a strictly local cause in persons otherwise in good health, in whom there is no cachexy or hereditary taint. If the tumor be of a schirrhous character, slow in its progress, single, distinctly circumscribed, without adhesion to, or implication of the skin or glands, and more especially if it be attended with much pain, or with immediate risk to life from any cause, and if the whole of the growth, together with a sufficient quantity of the neighbouring healthy tissues, can be removed, most surgeons of authority in these matters would consider it to be a fit case for operation.

In all encephaloid cancers, also, for the reasons already mentioned, early operation should, I think, be practiced with the view of prolonging life.

“An important question in connection with operations for cancer, is the period of growth at which they may be done with the most perfect success. Most surgeons were, formerly, in favor of removing

the affection as early as possible, feeling, that as it is difficult to say when the local form of the disease becomes constitutional, it is safer to remove it as soon as its true nature had been ascertained ; and this certainly appears to be the proper course to pursue with the *medullary* form of the disease. But with regard to *scirrhus* cancer, the opinion is gaining ground that in many cases there is a better prospect of success if the operation be delayed : and it is stated by Tanchou, by Hervez de Chagoin, and Leroy d'Etiolls, that the result of those cases operated on after the cancer has lasted for some time, is more favorable than that of those in which an early operation has been done ; the cancer often appearing to be arrested in its development and to localize itself as it becomes chronic, and having consequently a less tendency to speedy return after removal. It may also be reasonably supposed that the more active varieties of cancer, those that possess the greatest amount of vegetative activity and of reproductive power, may have got into a condition unfavorable to operation, or even may have carried off the patient before any period of arrest in their growth has occurred, during which their extirpation could be practised with a fair prospect of success. But these are points on which it is at present impossible, I believe, to form a definite opinion, as the facts before the profession are too limited to enable us to come to any safe conclusion on the subject.

Since the introduction of the Microscope into studies connected with Pathology, many knots have been untied that previously resisted all efforts, however continued, or industriously prosecuted. *Inflammation*, for example, long bid defiance to every exertion at an intelligent explanation. One theory after another has been brought forward, until we have had almost as many as there have been authors on pathology. While the truth has been closely approached by several of their theories, the mind still remained unsatisfied, because they could not be demonstrated. The microscope, however, now settles the question and reveals to the eye every movement connected with the process. As the author before us gives a very lucid and accurate description of the subject, we subjoin a few of his remarks :

“ We have seen that in congestion, the quantity of blood is increased, but the rate of its motion is lessened ; in determination we have every thing augmented ; there is an increased size of the vessels and an increased quantity of blood within them circulating through them with increased velocity.

“In inflammation we have a combination of these conditions ; we have an increased size of the vessels, an increase in the quantity and rapidity of motion of the blood ; but conjoined with this we have a tendency to its arrest, to its stagnation at points. In studying the phenomena of inflammation in the web of the frog’s foot under the microscope ; we observe that the first change on the application of a stimulus, is the momentary contraction, followed by dilatation of the artery ; the flow of blood through it and the capillaries is accelerated, retardation from congestion then ensues, and lastly stagnation at points.

“At these centres of commencing stagnation, it will be seen that the blood appears to ebb and flow, oscillating to and fro, and then stopping at last ; the immediate stagnation taking place in those capillaries, which are not in the direct line of the passage from an artery into a vein, and this arrest taking place by the adhesion of the red corpuscles coalescing by mutual adhesion into masses, which, after being carried bodily up and down more and more slowly, at last appear to block up the vessel, partly by overcrowding and distending it, and partly by becoming adherent to its walls ; this adhesion usually commencing at the angle of union between two capillaries. Around the stagnant part the vessels are crowded by an aggregation of the red corpuscles, which appear to be more closely packed in consequence of the draining away of the liquor sanguinis.”

A Treatise on Venereal Diseases. By A. VIDAL, Surgeon of the Venereal Hospital of Paris, &c. &c. With colored plates. Translated and Edited. By GEO. C. BLACKMAN, M. D., Fellow of the Royal Medical and Chirurgical Society of London, &c., formerly one of the Physicians to the Eastern and Northern Dispensaries, New York. Samuel S. and Wm. Wood, 261, Pearl street, 1854. (For sale by Randal Aston and Long.)

Before the profession has had time to read over, and reflect upon the work of Ricord and Hunter, on Venereal Diseases, and which was noticed in our last number, another one has made its appearance, and is thrown before the profession, done up in very superior style, by the publishing house of Samuel S. and William Wood, New York.

Messrs. Vidal and Ricord are both now attached to the *Hospital du Midi*, the great Venereal Hospital of Paris ; but, in many res-

pects, the doctrines of these distinguished syphilographers are very different. Venereal diseases were divided by Hunter into three varieties, *Primary, Secondary and Tertiary*. Ricord adopted this classification, as being in his judgment the best calculated to express the pathological changes, and the best for the purposes of instruction. Vidal prefers to express the changes under the title *Primitive venereal accidents*, and *consecutive venereal accidents*. But it is in regard to the *transmissibility* of the secondary form of the disease, that Vidal differs from Ricord. The latter, it is well known, has advocated the doctrine with great zeal, that the secondary form *is not* transmissible, and during all the time that this subject has been before the Academy of Medicine, it appears that he has been the principal, if not the sole advocate of the doctrine. To this doctrine, Vidal enters his protest in the work before us, and after appealing to his own experience, he refers also to the testimony of M. M. Valpeau, Lagneau, Gilbert, Yerdy and Roux, two of whom, it will be noticed, are distinguished syphilographers; and three, members of the Faculty of Paris.

The work is illustrated by colored engravings from designs that were executed by M. Bion, and they add very materially to its value.

Types of Mankind, or Ethnological researches based upon the ancient monuments, paintings, sculptures and crania of races, &c. &c., By J. C. NOTT and GEO. R. GLIDDON, and others. Philadelphia: Lippincott, Grambo & Co., 1854; p. 738, 8 vo. (For sale by Riley & Co.)

We have here a work which (in words from the motto of its title-page,) "may make thousands, perhaps millions, think."

The researches for the last ten or fifteen years in Ethnology—a science, as it may now be justly termed, scarcely antedating in origin, the second quarter of the present century—have brought to light a mass of facts, tending to modify very materially, the commonly received opinions as to the origin and antiquity of the human family.

The work owes its existence to the "*studiis conjunctis*" of Nott, Gliddon, Agassiz and Usher, scholars eminent in the specialties assumed by them; and in it the reader interested, (and who is not?) in such investigations, will find for the first time, in any language,

a systematic treatise on Ethnology, in accordance with the strict requirements of modern science. The book derives not a little of its value from the hitherto unpublished papers of the late Dr. S. G. Morton, to whom was assigned by common consent, the first place among the craniologists of his day, and to whose memory this volume is dedicated as a literary cenotaph.

It is copiously illustrated with characteristic wood-cuts.

Although subjects of this kind are somewhat variant from the scope of our journal, we are induced, from their general interest, to present a few of the salient points in the "Types of Mankind," viz :

1. That certain animals and plants were created in, and adapted to certain portions of the globe's surface, thus forming Zoological provinces, having a fauna and a flora exclusively peculiar.

2. That humanity obeys the same laws which preside over the terrestrial distribution of other organized beings.

3. That mankind did not spring from one pair, not even each race from one pair, but were created in numbers in the different Zoological provinces to which they were adapted.

4. The existence of man on this globe at a period greatly anterior to that assigned him by our present chronological system, is proven by the discovery of his fossil bones, imbedded in various rocky strata with the vestiges of extinct species of animals.

5. That physical characters are not changed by change of habitat, or in other words—climate has no influence in altering the races of men; destroy them it may, and does, but it cannot convert them one into another.

6. That certain races, the Negro, the Caucasian, and the Egyptian, (the latter now represented by the present Fellahs,) have existed in and around the valley of the Nile, unchanged in their physical characteristics, from ages before 3500 B. C., to the present time.

7. That craniological developements have had an important bearing on the destiny of races; that the large-headed have carried their civilizations to a much higher point, and have everywhere outstripped and dominated over, the small-headed races of mankind.

8. That *permanence* of type is accepted by science as the surest test of *specific character*.

9. That *prolificacy* of distinct species, *inter se*, is now proved to be no test of *common origin*.

In the elaboration of these, and similar "deducta" much Biblical exegesis is introduced, which forms no inconsiderable portion of the volume. While according to the several collaborators of the "Types of Mankind," profound and varied research in their respective departments, we cannot but think, that "a tone of handling" less oppugnant, less offensive to those holding opposite opinions, would not have weakened the force of arguments, or the credibility of facts. True science needs not the zeal of the polemic: the simple enunciation of her truths will always, sooner or later, command the credence she asks.

Hand-Book of Chemistry, Theoretical, Practical, and Technical. By F. A. ABEL, Prof. of Chemistry at the Royal Military Academy, and Assistant Teacher of Chemistry at St. Bartholomew's Hospital; and C. L. BLOXAM, formerly First Assistant to the Royal College of Chemistry. Philadelphia: Blanchard & Lea. 1854. [For sale by Riley & Co.] pp. 640, 8vo.

Chemistry is one of the sciences that has found that kind of mental constitution in the present age favorable to its cultivation. On many branches of the subject books have appeared in numbers; and from the fact that those engaged in the exploration have confined themselves exclusively to a special department, doing almost nothing in any other, we find ourselves, if we would become acquainted with what is going on, compelled to travel over a vast extent of territory, with here and there a beautiful settlement, and all the balance in wilderness, inviting the industrious to come in at once and secure "*pre-emption rights*." We hope the opportunity so favorable for the young men of the day will at once be embraced by those who have the taste for such labors, and that our generation may have the pleasure, before passing away, of taking a view of the whole territory in a high state of cultivation.

The volume before us is a synopsis of the experience of two industrious students, in Laboratory teaching; it gives the necessary instruction in chemical manipulation, a concise account of general chemistry, as far as it is involved in the operations of the laboratory, and lastly, qualitative and quantitative analysis. Leibig's plan for instructions in analysis has been adopted by the authors, with such

modifications as the progress of science and the special requirements of the English student required.

The work must prove useful as a laboratory guide, and contribute to enhance the reputation of its authors. Of Dr. Hofman, former teacher of the authors, it has received the warmest approbation.

Flint's Clinical Report, on Dysentery, based on an Analysis of Forty-Nine cases.

This report, accompanied the one noticed in our last number, and is a neat little volume of some ninety pages. The most of which, it is made up, appeared originally in the Buffalo Medical Journal during the last year.

The cases, forty-nine in number, are now submitted to the public in a more permanent form, with the hope, as the author states, that they may prove acceptable. There is a *supplement* to the report, which consists of remarks on the *causation, pathology and management* of the disease, preceded by a description of the post mortem appearances given by Dr. Carl Rokitsky, in his treatise on pathological anatomy.

As all know Rokitsky is professor of pathological anatomy in the Royal General Hospital of Vienna—an institution containing 104 wards, receiving in a single year 20,545 patients, of whom 2,678 die. In such a field, it is not strange that he should become the most distinguished morbid anatomist living; nor is it strange, that our author should insert in his report, Rokitsky's views on the "*dysenteric process*." Still, we confess that our taste would have been, to have seen Dr. Flint's valuable essay, made up entirely from his own observations. Besides, it is very questionable whether the observations of Rokitsky, on the lesions of structure will hold true of the disease, as it is modified in our country by the various influences of geology, meteorology, topography, &c. Dysentery is reputed with us to be also frequently connected with malaria, hence, we have what some of our authors on practical medicine have thought proper to term *intermittent dysentery*. Now, although the location in the intermittent form of the maledy may, and doubtless is the same as that assigned to it by Hippocrates, the large bowel, still the structural lesions must correspond to the combined charac-

ter of the morbid forces. Repeated paroxysms of intermittent fever, as all know are attended with congestions of the internal organs, among which, none perhaps suffer more than the spleen. Now, whatever gorges the vessels of the spleen, gorges also its tributary, the inferior mesenteric vein which carries the blood from the descending colon and rectum. From such congestions, inflammation of the mucous membrane frequently arises, and in this way *intermittent dysentery* is occasionally produced. Such is the reasoning of some of our physicians, and by those who have practiced extensively in malarious districts, it is received with considerable favor.

The author's observations on the *treatment*, show him to possess a philosophical mind. He confirms what, with respect to several of the leading articles, have been, for some time known to be true,—that mercurials are of doubtful propriety, and that opium is the most available among all the remedies known.

The two essays noticed, are specimens of Dr. Flint's method of investigating practical medicine; and any one who will be at the trouble to read them, will see that the Louisville University has secured the services of a man who will reflect great credit on it, and who is worthy to serve in a Faculty with such men as Yandell and Gross.

PRIZE ESSAY.—*On the use and abuse of Alcoholic Liquors in health and disease.* By WM. B. CARPENTER, M. D., F. R. S. Examiner in Physiology in the University of London, and author of the *Principles of Physiology*. With a preface by F. D. Condie, author of *Practical Treatise, on diseases of children, &c., &c.* Philadelphia: Blanchard & Lea. For sale by Riley & Co.

It gives us much pleasure to notice this little volume of near two hundred pages on one of the most important subjects connected with life.

But what is more gratifying is the fact, that the views set forth, are not only those of the most learned physiologist living, but they are in harmony with the experience of the medical profession.

The views to which we allude, go to establish the position, that alcoholic liquors in health, are not only subversive of the integrity of the various processes of the human organism, but that they act

as poisons—slow sometimes in their effects, but not the less certain in producing decay and premature death.

For the best essay on this subject, it seems that a prize of one hundred guineas was offered, and it appears that the essay had to contain answers to the following questions :

“1st. What are the effects, corporeal and mental, of Alcoholic Liquors on the healthy human ?

“2nd. Does physiology or experience teach us that Alcoholic Liquors should form part of the ordinary sustenance of man, particularly under circumstances of exposure to severe labor, or to extremes of temperature ? Or, on the other hand, is there reason for believing that such use of them is not sanctioned by the principles of science, or the results of practical observations ?

“3rd. Are there any special modifications of the bodily or mental condition of man short of actual disease, in which the occasional or habitual use of Alcoholic Liquors may be necessary or beneficial ?

“4th. Is the employment of Alcoholic Liquors necessary in the practice of Medicine ? If so, in what diseases, or forms and stages of disease is the use of them necessary or beneficial ?

The Adjudicators were Dr. Jno. Forbes, F. R. S. Dr. G. L. Roupell, F. R. S., and W. A. Guy, M. B., all men well calculated to act as judges.

The author placed on the Essay the motto—*Mens sana in corpore sano*.

Elements of Human Anatomy ; General, Descriptive, and Practical.

By T. G. RICHARDSON, M. D., Demonstrator of Anatomy in the Medical Department of the University of Louisville, and one of the Attending Surgeons to the Louisville Marine Hospital : Philadelphia ; Lippincott, Grambo & Co., 1854, p. 734, 8vo.

Although we heard, a while since, that Dr. Richardson was engaged in preparing a hand-book on anatomy, we were surprised to find it so soon on our table for notice. Not but what the young author has as much right to write a book, in this book-making age as any one else ; but because we could not exactly see the necessity of multiplying books on Descriptive Anatomy, a department of science that admits of but little improvement, except in the microscopical and chemical departments. With Descriptive Anatomy, the author, however, has united General and Practical in the work before

us, so as to render it unnecessary on the part of the student just entering upon the study, to provide himself with separate books on these different branches. He has also substituted, as far as practicable, English for Latin terms.

On looking through this work, we see many things in the way of arrangement highly creditable to the author's judgment and taste, and that will prove serviceable to those for whom it has been prepared.

With the effort to do away, as far as possible, with the use of Latin names, we are not favorably impressed ; and against another edition of the work is called for, we think the author's mind on this matter will have undergone a change.

PART FOURTH.

EDITORIAL AND MISCELLANY.

OHIO STATE MEDICAL SOCIETY.

This society held its annual session for the present year in Cincinnati. The session commenced on the first Tuesday of June, and lasted three days.

The officers elected for the present year, are Dr. Charles Woodward, President ; and Drs. W. W. Dawson, and _____ Secretaries ; and P. Crume, Treasurer.

We have not the minutes before us, but will publish them at length in our next number. In the mean time, as we were in attendance, and took some notice of the proceedings, we will give a few impressions.

The attendance, although respectable, was not large. This was due to the fact, that the physicians of the city did not generally make their appearance at the meeting ; and also to the circumstance that the place is on one side of our State, and on that account, did not secure so general an attendance from the interior as a more central point, would have done.

Throughout the proceedings, were rather harmonious, more so than might, *a priori*, have been expected.

The papers read, were more numerous than usual, and some of them quite elaborate. The Prize Essay was written by M. B. Wright, M. D., on the subject of *Shoulder Presentations*, their Mechanism management, &c. Two reports were made by Standing Committees, one by Dr. Dorsey of Piqua, on Surgery; the other by the chairman of the committee on Ethics. Dr. L. M. Lawson read a very elaborate paper, on the signs mostly of Phthisis Pulmonalis. Dr. Comegys read one also on Phthisis, but confined himself principally to a consideration of the *causes* and *treatment*. Dr. Armor read a short paper on *latent* pneumonia; and Dr. Mendenhall, one on *nitric acid*, as an anti-periodic in the treatment of intermittent fever.

Some of the above papers were slightly discussed, though the time usually allotted to the meetings, is too short to admit of much more than a mere reading of the matter brought forward, and the transaction of business, connected with the policy of the society.

Considered in a literary point of view, most of the papers were highly creditable to their authors. Some criticism was offered on the originality of several of them. It was stated by some of the speakers that the greater part, if not all the matter embraced in the essays, could be found in books. Grant this as being true, still their value may not be lessened. Original researches, and observations have their place, and their use; and always give the individuals connected with them great character. But they are not always available. Facts and truths frequently come to us in an isolated form, sometimes in a chaotic mass. Another work, perhaps not secondary in importance, is to arrange and classify them, so as to make them practical—to make them of use to the profession. Leibig for example, as well as others of our chemists, have been extensively engaged in chemical researches, by which new discoveries have been made, new truths added to the commonwealth of science. Many of these now lay scattered through the transactions of learned societies, or in the journals of the day. What more valuable to the profession, than to select them out, and place them in a position for practical purposes? It was long known that steam possessed power, and that Iron wire would conduct a current of Electricity; but the application of these truths to the various uses, of which they have been found susceptible, has given character, not only to the individuals who have been engaged in the work, but to the

age in which we live. Again, statistics have been kept at various points in our country on Meteorology, observations have been made, and are still being made on Geology, Topography Hydrology—indeed on most of the important matters connected with climate. From these different sources, truths valuable and available, may be collected and placed in a form for use ; and to those who think proper to employ their time in labors of this kind, our profession are often under as great obligations as to those engaged in original researches.

We see therefore, no propriety in the objections, so often taken to papers not strictly original. Those who make them, although they assume to themselves the "*Judgment Seat*" seldom ever fail to betray a want of information, touching all the things that ought to be taken into consideration.

For original researches, we confess ourselves, that we have a great love ; and with respect to those engaged in them, like in the characters of the bold stout-hearted pioneers who led the way to the civilization of the western world, there is something peculiarly attractive and pleasant to contemplate. Who of us would not like to look upon Hippocrates, Hervey, Haller, Boerhaave, Jenner, Sydenham ? and with what veneration, do we regard their labors. But the discoveries of these illustrious personages have their place. Truths with which they became acquainted, but of the application of which they knew nothing, have been placed by others in a position to become available, and hence the labors of the latter class of persons should not be overlooked.

Most of the committees that failed to report, were continued through the present year ; and are expected to have their reports ready by the next meeting of the society at Zanesville.

Several new committees were organized for the investigation of special subjects. Among these was one from whom, we hope no report will ever be received. We allude to the one whose duty it is to inquire into the propriety of revising our Code of Ethics. There was no necessity, in our humble opinion, for any such committee. Our Code of Ethics needs no revision. It is generally known, I presume, that it is the same as that of the American Medical Association. After this body had revised theirs, and made it as perfect as possible, our State Society adopted it. It therefore, not only embraces the judgment of our own Society on Ethics, but also that of the National, and is as perfect as any that can be prepared. But it

is not certain that those who moved for the appointment of this committee, desire merely *revision*. Indeed, we have the evidence to know that their design is *destruction*. They wish to erase every thing from the profession, in the shape of Ethics. To laws fixed up in the form of a code, they are instinctively hostile. We heard their logic in favor of the abolition of the Code of Ethics, and have only to say that, if it is true, it will abolish all law, both human and divine. Certain restive spirits, we have no doubt would get along more smoothly, provided they could be so situated as to appropriate to themselves the immunities couched in the saying, "*Where there is no law, there is no transgression.*" But we live in an age that recognizes the obligation of *all* to law: every person and thing, it has been found proper to place under the restraints of law.

In concluding our notice of the late meeting of the society, we take pleasure in saying, that our reception in the city was cordial. We met a goodly number of old acquaintances, and those who are as zealous as ever to leave nothing undone that will contribute to the advancement and purity of our profession. Since, however, the last time that we assembled with our professional friends in the Queen City, several have been gathered from their earthly labors, to explore and realize the things of the future world. Among these was one who was formerly on such occasions foremost in every good and useful work, one who gave character to every association with which he was connected,—indeed, to the medical profession of the United States. All know that we allude to the late Dr. Drake. No one, situated as we were, could have failed to notice that the place which he always filled on such occasions was unoccupied. As in medical science he had no superior, so in the social circle,—the qualities of his heart, the readiness of his wit, brilliancy and agreeableness of his thoughts, marked him always as the leading spirit of the company. We shall never, perhaps, see his like again. But Cincinnati, if for no other reason, will be dear to medical men as being the theatre of the most distinguished medical man which the last ten centuries has produced.

During the deliberations of the society, an application was made for membership by an individual who, at one time had a connection with the regular faculty, but has been for a few years since engaged in figuring among the "*Eclectics*," in the character of a lecturer—and occasionally concerned in getting up nostrums. Being convinced of the error of his ways, he desired to return, and

stated as his reasons for so doing, that he was satisfied, that the regular system, was the only one in which an honest scientific man could live, and in it, he desired to spend the remnant of his days. His case was referred to a committee that reported favorably ; but the report was, after considerable discussion, laid on the table. Thus ended the application of Dr. — Cox for membership. He made all the acknowledgments before the committee that could be desired, but the profession in the city seemed to want confidence in him.

The society holds its next meeting at Zanesville, where it is expected a fine ingathering will take place, and many in that region of the State, learn the advantages to be derived from organized effort.

Remarks on Croup, and its Treatment. By HORACE GREEN, M. D. New York. 1854.

A pamphlet, of some twenty pages, has been forwarded to us with the above title, and in looking over it we at once recognized the reason of its appearance. With the previous method of treating Croup the author appears dissatisfied. It seems that in '48 he published a small treatise on the "Pathology of Croup and its treatment by topical applications," in which the declaratian was made, that the practice of making topical applications of medicinal agents into the larynges of young children for the treatment of membranous croup, is entirely practicable, safe, and when judiciously employed, *in the highest degree efficacious.*

Since the publication of the work alluded to, the author states that he has had an opportunity of treating a considerable number of cases, and that he has received from eminent men at home and abroad, accounts of cases treated according to his plan, of which the results have been highly satisfactory. The topical application is made with a probang, dipped in a solution of nitrate of silver (ʒii to ʒj aqua.)

With the standing of the author we are not very well acquainted. There is something, however, in his style, and in his expressions, in regard to former methods usually adopted in the treatment of croup, that has not made on us a very favorable impression. Talking about the "*perturbating*" method connected with the use of the lancet, antimony, and calomel, as he does, seems to us to have some relation to the *sophism of presumption*. From what book, or from whose experience has the author learned that the lancet, or antimony, or calomel is "*perturbating*?"

To the suggestion that topical medication will, in some cases, be productive of good results, we have no objection. The plan is reasonable, and should not be disregarded in the treatment of severe cases of the membranous variety of croup. Croup, however, is not the only complaint in which this kind of medication of the upper part of the the air passages has been found to be efficacious.

NOSTRUMS—LEGISLATIVE ACTION.—A Bill was before our last Legislature which made it incumbent on those engaged in the manufacture of *nostrums*, to place a label on each preparation or compound, stating the name of the ingredients out of which it was composed. When it was supposed that the bill would pass into a law, several of the manufacturers, from our own State, and from other States, made their appearance, as if by magic, armed with their own peculiar kind of logic, and a little of the *material* that excites liberal views, and disposes those who swallow it to the contemplation of the bright side of pictures. They did not say any thing about the care with which they themselves deliberate upon the per centum of gullibility in the people, but placed their defence upon the ground that at the present time there is an investment in Ohio in nostrums equal to about two millions of dollars, and that if the bill before the Legislature should pass, it would not only sink this large amount of capital, but would destroy an annual trade in one city alone, Cincinnati, of about two hundred thousand dollars. Of course such arguments set some of our legislators to thinking over the stand they had taken, and the result was, many that had promised to vote for the law, began to show signs of a disposition to recede, and, on the final vote, the bill was lost.

If they had investigated the matter rightly, they would have found out that there is no more involved in a law that destroys all the patent medicine trade at one blow, than there is in the confiscation and destruction of the base metals and implements of the counterfeiter. Indeed, between the two classes of persons, the Nostrum-makers and Counterfeiters, a parallel might be run for a considerable length. It would be, however, all the time in favor of the latter. The former decides to make money by the robberies he can perpetrate, notwithstanding the sacrifice of human life incident to his business; the latter to make money by robbery alone.

While the bill was before the Assembly, there were a number of speeches made upon it, *pro et con*. As a sample of those made against it, we give one from a Senator, whose district includes one of the principal cities in our State. It is as follows :

“ Mr. Bartlett said, the reason why doctors were so anxious to break down these patent medicines, was the fact that they could not stand the competition. These medicines were soothing and agreeable in their effects ; worked upon the imagination, and many men, by using them, save in a few months enough to school their children a year. These medicines, as he was informed, were generally made by regular physicians—old practitioners—men who have spent many years in the practice of medicine. He would, therefore, oppose the passage of the bill.”

This speaks for itself. If a volume were written upon the ignorance of the people,—how little the masses really know of what their interests are in regard to things medical, it would fall short in conveying any correct idea, compared with what may be inferred from the above speech. Here is a representative of the people, one who is presumed to reflect their feelings and will, in all his official acts, and certainly should in one involving health and life ; now see how his thoughts run about *doctors' patent medicines*, and the way children may be schooled !

THE SECOND VOLUME OF DR. DRAKE'S WORK, is now passing through the press, and will be out in a short time. This, which is confined to a description and treatment of diseases, will, in connection with the previous volume, mostly on Etiology, make a work on the diseases of the Interior Valley of North America that will give character, unless we are mistaken, to Western Medical Literature.

NECROLOGY.—Prof. Jameson, who has occupied the chair of Natural History in the University of Edinburgh for half a century, is dead.

The following books have been received and will be noticed in our next number :

West on Diseases of Children; Lea & Blanchard, Philadelphia.
Fulleron Rheumatism; Samuel S. and Wm. Wood, New York.

A copy of the Transactions of the American Medical Association has been forwarded to us some time since. Before receiving it we gave a notice of its publication.

Single copies will be furnished to members of the Association for five dollars. Two copies for nine dollars. The present volume no physician should be without. Meigs' paper is worth the price charged for it.

New Orleans, during the past season, presented a spectacle not often heretofore witnessed on any part of our earth. Diseases are something with which we have all become more or less familiar, but it is not often that the ravages which Yellow Fever has made upon the Mississippi delta the last year, occur in the experience of a generation. Nor are such thoughts as the following, from the pen of the distinguished Dowler, often noticed, after an epidemic of the kind has subsided:

“YELLOW FEVER IN NEW-ORLEANS—BEAUTIFUL AND HORRID PICTURES.”

“CONTRASTS.—The earth, air and sky seemed to be in the midst of the pestilence; such as Gothe described, which appear in the strongest contrast, when humanity is desolated :

“Know'st thou the land where the pale citron grows,
And the gold orange through dark foliage glows?
A soft wind flutters from the deep blue sky,
The myrtle blooms, and towers the laurel high.
know'st thou it well?

“O there with thee!

O that I might, my own beloved one, flee!”

Yet, in the midst of such scenes the Angel of Death poured out the phials of his wrath. Coffin rumbled with coffin; the funeral columns defiled almost constantly for months from every street

“To join
The innumerable caravan that moves
To the pale realms of shade.”

SUN-SET.—As the day declined the funeral march became dense, continuous, and often blended. It was then that nature was sere-

nest, while the sun was sinking into the cypress forests, his slantest rays dying with variegated hues, the trembling waves of the river, recalling to the mind the sublime descriptions of Scott and Goethe ; the first relating to a tropical sun-set, and the second one in the temperate zone :

“ No pale gradations quench his ray,
No twilight dews his wrath allay ;
With disk like battle target red,
He rushes to his burning bed,
Dyes the wide wave with bloody light,
Then sinks at once—and all is night.”

See how the green-girt cottages shimmer in the setting sun ! He bends and sinks. Yonder he hurries off and quickens other life. Oh ! that I have no wing to lift me from the ground, to struggle after, forever after him ! I should see, in everlasting evening beams, the stilly worl at my feet—every height on fire—every vale in repose—the silver brook flowing into golden streams.***. I hurry on to drink his everlasting light—the day before me and the night behind—the heavens above, and under me the waves.”

POETRY OF THE PESTILENCE.—These contrasts between the beauty and repose of nature, and the march of death, gave rise to several poetical contributions, which were cut short in some cases by “ the pest king,” whose power they were recording—the muse trailing her fast-failing wings in the polluting blood and black vomit :

—————“ All hoping is past !
The black draught of Death is ejected at last !

So reads one the unfinished black vomit poems of 200 lines, by a physician, who died of the *vomito*, which he sung.

Another says :

“ The sun sinks down o’er each death-crowded street,
Whilst dread, delirious screams the hearing greet ;
Night settles o’er with awe and fear and gloom.
What means yon glaring blaze, yon cannon’s boom ?
Ha ! victory’s tokens for the Conqueror Death !
Who slays his thousand by the Fever’s breath !”

NIGHT.—Night was ushered in, for a short period with cannonading, and, for a considerable time with conflagrations from burning tar, the towering flames of which cast a sickly flickering light among the streets, upon the river, and into many a dilapidated window, upon yellow, rigid corpses, awaiting interment on the morrow.—Dr. Dowler.

Homœopathy.—Its Tenets and Tendencies, Theoretical, Theological and Therapeutical. By J. G. Simpson, F. R. S., Edinburgh. Philadelphia: Lindsay & Blakiston, 1854.

Homœopathy, Fairly Represented, Not Misrepresented. A Reply to Simpson's Homœopathy. Philadelphia: Lindsay and Blakiston, 1854.

Both of the above works are for sale by Randall, Aston & Long. As we have expressed an opinion in our last number, in general terms, in relation to the Homœopathic controversy, we have nothing further to state, than that those who are curious to know all about the matter, will find a full expose in the above works, *pro et con*.

PROFESSOR LAWSON.—This eminent medical gentleman who would give character to any School with which he would connect himself, has resigned his place in the *Ohio Medical College*. His chair in the Faculty will be occupied at the approaching session by Prof. Armor, who has made Cincinnati his place of residence, and who, we should think, will be found to be available in his new position.

JOHN A. WARDER, M. D. has recently been appointed to the chair of Chemistry in the *Ohio Medical College*, the same chair formerly occupied by LOCKE. Success to W., his industry and eccentricities, may prove to be elements of success if rightly directed.

INTUSSUSCEPTION—*Death after 14 years.*

Some fourteen years since we had a case of *Intussusception* in a boy about 6 years of age, followed by the discharge of a portion of gut $29\frac{1}{2}$ inches long, embracing the cœcum appendicula vermiformis and a large portion of the colon, with parts of the meso-colon attached. The discharge took place while the patient was at stool on the 17th day of his illness; after which the urgent symptoms all subsided, and the patient very gradually recovered his health. For some years he was delicate, but he, nevertheless grew until he attained the ordinary height of manhood. Although he labored on his father's farm for the last ten years, he at no time seemed to enjoy good health. Bowel affections he seemed to contract with facility, and has been on the invalid list a great portion of his time.

Having been in the neighborhood lately where the patient resided, we learned that he died of phthisis pulmonalis in the spring, and very much regretted to find that no post mortem had been made. We should have thought it no trouble to have went to the neighborhood from this city, a distance of some 60 miles, to have ascertained the manner in which the bowels became united after the portion expelled, so as to preserve the continuity of the canal.

The portion of intestine discharged is in the Pathological Museum of Louisville University. Notes of the case were published at the time in the Western Journal of Medicine and Surgery.

YOUNG PHYSIC.

In all periods of the world's history, aged men—those who may be considered locomotive libraries, filled with volumes of knowledge and experience concerning the past, have been regarded as having their proper place in the front ranks of society, and of all the learned professions, so as to be in a position to give direction to all measures of importance.

Lately the integrity of this time-honored custom has been assailed in so many of the departments of society, that fears are entertained that the movement will have a kind of epidemic prevalence. In its spread it has already found its way into the medical profession, and as a consequence, the name "*Old Fogie*" is about to be canonized as a term full of meaning, and without the use of which not only our system of nomenclature will be out of proportion, but we would be unable to make useful distinctions in regard to many of the important interests of humanity.

That this is an age of great progress, and characterized with some of the most extraordinary inventions and improvements that have ever characterized the race, are facts so obviouss, that no one will controvert them, unless he has been for the last quarter of a century in close communion with Morpheus. But that it will be an improvement to give the cold shoulder to, or invite into retirement every man who happens to have a few grey hairs on his pate, regardless of every other consideration, is one of the edicts of the times, that has struck some members off the profession as being of not quite as much use as the "*Moral Law*." Pushing the old men aside, dismissing them from the stage of action, in order to make room for

"Young Physic," will not, it is imagined, make it less necessary to give *physic* than formerly. Badinage aside, we desire to see the young men of the times ambitious in moving forward to the positions to which they imagine themselves called upon by the interests of humanity to fill—have no great desire, however, to see them volunteering with so much patriotism, if a military figure is allowable, to attend to the sepulchral rites of the old. In former times, men after having filed the measure of their usefulness, died a natural death. Perhaps the same thing will occur again. Suppose we wait and see if Nature is "*semper idem*."

The foibles and frivolities of youth are not less prejudicial to the inquiries connected with medical progress, than the dotage or dogmatisms of age, and there are just as many reasons why the former should be unfavorably regarded as the latter.

What conduces to bring about the best state of things, is perhaps a mixture of young and old blood in something like equal proportions. This kind of a compound secures the experience, profoundness, discretion, etc., of the aged, and the zeal, energy and go-a-headativeness of the young.

M. ROUX.—This eminent Surgeon, Paris correspondents say, is dead. He has been connected with the profession for 58 years, and for the last thirty years has been regarded as the most eminent Surgeon in Paris. On the death of Dupuytren, he became the senior Surgeon of Hotel Dieu. Saturday evening, January 28th, while shaving himself to go to the ball of Hotel de Ville, he had an attack of apoplexy, and died on 24th March, at the age of 73. The following is an account of his funeral :

FUNERAL OF M. ROUX.

"The funeral of M. Roux took place on the 27th of March. The religious service over his remains was performed in the church of *St. Germain-dez-Pres*. M. de Castlenau in his own terse style, says, "the funeral of M. Roux was worthy of his memory." His remains were deposited in the cemetery of *Mont-Parnasse*, where rests the illustrious Lisfranc. Six discourses were pronounced—by Messrs. Velpeau, in the name of the Institute; Malgaigne, in the name of the Faculty of Medicine; F. Dubois, in the name of the Academy of Medicine; Marjolin, in the name of the Society of Surgery; Larrey, in the name of the Military Surgeons, and Duchaus-

soy, in the name of the Hospital Interne. M. Malgaigne's discourse is an evidence of that wondrous power of intellect which characterizes the great orator. M. Velpeau's discourse was admirable as a true appreciation of his dead colleague's career. I cannot refrain from giving the apostrophe with which he concludes ; it is exceedingly touching. "Venerated master, faithful friend, thou hast nothing to fear from the celestial life, thou hast done thy duty toward thy fellow-creatures, thy career has been fully, nobly performed ! Thy memory will never perish ; thy name, ever honored, will occupy a great and illustrious page in the history of useful, of learned men. From the abode of the elect, God will permit thy great shade occasionally to cast an indulgent look on us ; then thou wilt know that among thy former students, there is one who will cherish thy remembrance, and be grateful to thee to his last hour ; who, in bidding thee an eternal adieu, leaves thy grave, his heart bursting with tears and sorrow."

"In concluding this notice (brief for the want of space,) I may be permitted to make an extract from my Diary to show the beautifully poetic thoughts which occasionally emanated from this *great surgical illustration*, even in the wards of the hospital.

"Sept. 27th, 1852, Monnay. *Hotel-Dieux; Roux's service. Gosselin acting.* Although we are in the vacation, M. Roux follows the service, dressed with extreme elegance, he pours forth a torrent of remarks, questions *and answers*, on, and respecting all the important cases. The *agregé* (M. Gosselin) from time to time, expresses an opinion in opposition to that of the professor, which gives rise to a little discussion—as in the case of Stone, No. 13, where M. Gosselin advocates lithotrity, M. Roux lithotomy, for the old man loves the bistoury passionately. As a general thing, he appears delighted when his pet (for M. Gosselin is such) gets the advantage of him ; then with his characteristic elevation of eyes and arms, he exclaims, "*peut-etre ! peut-etre ! peut-etre vous avez raison !!!*" (perhaps, perhaps, perhaps you are right) * * * * * As M. Roux passed bed No. 60, one of the sisters told him that the patient was dead, "ah, it is ever thus," he said, "we wither and fall like leaves." I walked beside him for a few steps, when he suddenly turned to me and exclaimed, "yes, we are but leaves on the Tree of Life, for a brief space we bask in the sun-light of heaven, then we drop to the ground and decay, leaving our place on the mother branch to be filled by the new born bud !"

COOPER.

SIXTH VOLUME OF THE JOURNAL.—NOTICE TO SUBSCRIBERS.—With the present Number, the Journal closes its sixth volume. Many subscribers are still in arrears, some for several of the back volumes, and quite a large number for the present. We send our bills, and hope they will meet with a cordial reception.

STARLING MEDICAL COLLEGE—REORGANIZATION.—The board of Trustees have reorganized the Faculty of this Institution, as will be seen by the official advertisement. By those interested in the future of the school, the measure has been deemed advisable ; and it is hoped, that it will meet the approbation, and secure the confidence of the profession in the West and South.

DETECTION OF BLOOD-STAINS ON A KNIFE COVERED WITH RUST.—M. Daubrawa was requested to ascertain the existence of blood-stains on a knife which was suspected to have been used in the commission of a murder. The knife, having lain a long time in a damp place, was rusted ; but certain bright rust-free spots could be distinguished amidst the rust. On heating the point of the blade, these spots scaled off while the rust remained adherent ; on the other hand, on immersing the knife in dilute hydrochloric acid, the bright spots remained untouched, although the rust was readily dissolved. It was probable that these bright spots were blood-stains ; but as some non-nitrogenous organic acids will produce similar marks, some of the detached scales were heated in a test tube, and by the disengagement of ammonia from the hæmatine of blood, caused a blue color on reddened litmus paper. The whole blade was then macerated for a long time in distilled water, which acquired a reddish discoloration ; and by the aid of a lens, fibrine could be seen adhering to the blade in the situation of the bright spots. Ammonia added to the solution caused no precipitate ; nitric acid gave a white precipitate ; it became turbid from heat ; solution of chlorine at first produced a green tint, this color then disappeared, and white flocculi were deposited. These different fluids having been evaporated to dryness and burnt, and the residue dissolved in hydrochloric acid, demonstrated the presence of iron by its appropriate reagents.—*Jour. de Chimie Medicale.*

Quarantine and Yellow Fever.—We see from the public prints, that the subject of quarantine, as a means of keeping out yellow fever, is agitating the public and professional mind of New Orleans. We had supposed that the experience of the past few years, as brought to light by the late quarantine Congress of Europe, had given the quietus to this miserable system of transatlantic foggyism ; and we are therefore surprised to learn that the obsolete idea of quarantine restrictions finds any favor in the enlightened city of New Orleans. If any fact, in reference to the spread of disease, is clearly established, this, it seems to us, is one of those facts—namely, that if a disease be contagious, quarantine is powerless in preventing its spread ; and if not contiguous, then it is clearly an unwarrantable interference with commerce and the intercourse of men.—*St. Louis Med. Jour.*

New Method of administering Sulphate of Quinine.—In the Medico-Chirurgical Review, for September, 1853, we find a notice of an article by Dr. Bertella, on a new method of administering sulphate of quinine. This plan consists in combining with the quinine an equal quantity of tartaric acid, which has not the effect of decomposing the salt, but of rendering it more soluble, and of causing absorption to take place more readily. He gives at a dose three grains of dissulphate of quinine, and three of tartaric acid. The dose at the commencement is from six to twelve grains of each.—*St. Louis Med. Jour.*

IPECACUANHA EXTERNALLY.—As a counter-irritant, ipecacuanha is said to possess similar virtues to tartar emetic, without any of the disadvantages of the latter remedy. It causes a pustulation similar to that produced by the tartar emetic, which is attended with little pain, and heals readily without a cicatrix. In diseases of children, and when such application is desired upon exposed surfaces which would be disfigured by cicatrices, the ipecacuanha is much to be preferred. It may be applied either in the form of an ointment, or by being sprinkled over the surface of a pitch plaster.—*St. Louis Med. Journal.*

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